

CONSERVATION STATUS ASSESSMENT COMMENTS
1st DRAFT NORTH AMERICAN WATERBIRD CONSERVATION PLAN- MARSHBIRDS

eg. CONTRIBUTOR:

date of comment

[contact information for contributor](#)

Comments and suggestions.

+Response of and actions taken by Conservation Status Assessment Committee.

GAVIIDAE

Red-throated Loon

Christine Eberl

emailed to Katharine Parsons Monday, August 22, 2005

Christine.Eberl@ec.gc.ca

I have examined the material and found I disagree with ratings assigned to at least two of the parameters being assessed. I will elaborate for each, below:

2. Population Size. My recommendation: Change from #2 rating to #3 rating. Reasoning: a) In your RTLO assessment on PS, I have pulled the following quote with which I disagree: "375,000t—(Delany and Scott 2002: continental population estimated at 125,000 pairs=375,000 individuals (Barr et al. 2000)". In other words, this population quote was in Delany and Scott 2002, *as cited in Barr et al. 2000*. Unfortunately, this population number is no-where to be found in Barr et al. When working on this BNA account, I was the person who did the population status section, so I am quite familiar with the numbers - and these numbers are not part of the Barr et al 2000 publication and should not have been quoted as such. I have contacted Delany about this as a 4th edition of his paper is currently *in prep*. If you wish, I can forward you the letter I wrote him.

+Changed PS factor score to 3

b) Current estimates from about half the RTLO breeding area in North America which has had censuses completed, total about 22,000 birds. Most of these counts were relatively recent (except for one count from the 1950s). Because much of the area NOT included in this total is suboptimal habitat (not coastal), doubling this value to total 44,000 RTLO individuals in the plan area would be, I believe, very liberal. Even with this liberal estimate, the PS rating for RTLO would no longer be within the #2 category of the 1-5 scale, but would be more accurately reflected by the #3 category.

5. Breeding Distribution and 6. Non-breeding distribution. My recommendation - 5. BD possibly change #3 rating to #2 rating, 6 ND: change #2 rating to #3 rating. Reasoning. My first impression of these two sections was that given the draft assessments BD of 3.4 million sq kilometers for RTLO, the quoted 13.8 million sq km given for ND did not make sense (it is 4 times to BD), as even if you added the nearshore marine wintering distribution of RTLO to the BD, the total distribution should not even double. So I used my MapInfo GIS program to sketch out the breeding range (including only land mass used) as given by the BNA account, and my resulting BD came to about 6 million sq kilometers - NOT including Greenland and Iceland, which would marginally change to scale rank to #2 from #3. The total wintering distribution area (keeping in mind that RTLO inhabit *shallow* coastal waters in the winter) came to 1.4 million sq km. I was also unclear on whether this ND distribution should include the BD range as well as it is not clear in the 'assessing factor scores' document under what conditions it is included. However, if I do include it and add it to the wintering distribution, the total area comes to 7.4 million sq km, which would change the #2 rating for the ND to a #3 rating. HOWEVER, if only the wintering distribution is considered, then the rating should be changes to a #4.

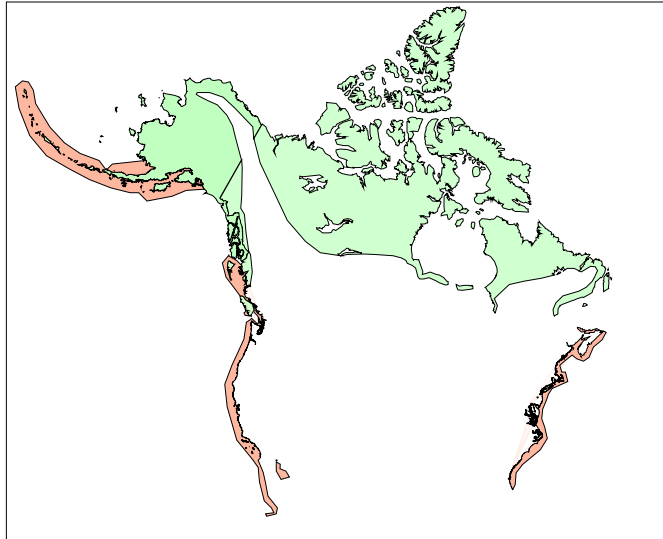
(non-breeding RTLO do occur in the breeding distribution in the summer so I believe the former change would be more appropriate.

+Changed BD factor score to 2

+Changed ND factor score to 3

I have attached the breeding and wintering distribution sketch that I created with MapInfo for your reference. If you disagree with the values I obtained with it, I would appreciate knowing how your numbers were achieved.

rtlo distribution map



Ron Bazin (Canadian review team)
emailed to Katharine Parsons, 14 Nov 05

Ron.Bazin@EC.gc.ca

Population Trend

Most decline is in western tundra; no decline on North Slope or in boreal forest (McCaffery 1998 cited in Barr et al. 2000)

“slight growth in the regional population of Red-throated Loons” at a study area along the Beaufort Sea from 1985 to 1989 (Dickson 1992)

population estimates on w. Victoria Island appear stable between 1992-1994 and 2004-2005 (CWS unpub. data)

stable to slightly increasing population trend in Red-throated Loons in North Shore Migratory Bird Sanctuaries in Quebec from 1925 to 2005, with larger increases in the last 30 years (CWS unpub. data, small population numbers)

+Added above information to profile

It is estimated that >70% of the N.A. population is in Canada as per the Canadian Waterbird Conservation Plan, thus argument could be made for a PT of 3 as Canadian data shows stable to slightly increase, although data is very limited. Canadian Plan has RTLO as Low Concern (with PT=3), thus PT of 3 giving Moderate concern could be justified.

+Canadian team recommended a PT score of 3 or 4; Marshbird workshop agreed to PT=4

Population Size

9,843 breeding birds in Alaska, 784-892 breeding pairs on Queen Charlotte I., 627 on nw and sw Victoria I., 5,000 on Banks I., 402 in Rasmussen Lowlands, 2,250 pairs in Quebec

-current estimates from about half of RTLO breeding area in N.A, which has had censuses completed, total about 22,000 birds (Eberl, pers. comm.)

+Added above information to profile

Keep this factor score at 3, instead of changing to 2 as suggested by the Marine breakout group. Does the Marine group have additional information to suggest a change, or is it based on the numbers presented (375,000) which were incorrect? The new corrected numbers put it as a 3. The Delany and Scott 2002 quote for population estimate should be removed as it is incorrect and misquoted (this number never appears in Barr et. al. 2000); see attached correspondence from Eberl to Delany and to K. Parsons. Instead I would quote the 4th edition of *Waterbird Population Estimates* due out in November, in which hopefully a proper population estimate will be given for N.A., since Delany is now aware of the error noted in the above comment.

+Marshbird workshop agreed to PS=2 based on the Marine Breakout group's comment: "not comfortable with Eberl's population estimate of 44,000 pairs. Not enough data on her census data." Due to apparent confusion on pairs versus birds; restore PS to 3 as recommended by species expert (Eberl) and Canadian review team. Include 4th edition Waterbird Population Estimate when available.

Threats to Breeding Populations

"...vulnerability to offshore oil production" in Beaufort Sea area (Dickson 1992) and effects of oil spills at production sites.

Red-throated Loon is coastal species that is vulnerable to coastal development and pollution (L. Dickson, pers. comm.)

Human disturbance (e.g. mining) has potential for nest failure, as birds will stay off of nest for long periods of time when flushed (L. Dickson, pers. comm.)

+Added above information to profile

"relatively high mercury levels in eggs" This was for sw Sweden, not populations in N.A.

+Deleted mercury information from profile

Threats to Non-breeding Populations

Forsell (1999) reported impacts of bycatch from mid-Atlantic fisheries on wintering bird populations and found an estimated 2,387 birds (68% of which were Red-throated Loons) drowned in mid-Atlantic fishery gill nets, while 825 were found washed up on beaches, all over a two month period in 1998. High densities of birds in wintering areas may increase coastal populations' risk to disease outbreaks (Brand et al. 1983)

+Added above information to profile

This score could arguably remain a 5 as Forsell has specifically documented the bycatch threat, showing significant numbers, but scale of the problem on the overall population unknown. Marine group reduced this to a 4 – what is their rationale for doing this? Ultimately the score could be a 4 or 5 as it won't change the overall category. (4 if Marine has good rationale as scale of threat unknown)

+Marshbird workshop agreed to TN=4 based on the Marine Breakout group's comment: "not as susceptible to oil spills as other loon species because of a more dispersed pattern on the wintering grounds."

Breeding and Non-breeding Distributions

These factor scores for BD and ND don't correspond with the actual areas provided here. They were changed in response to C. Eberl's comments which is fine as she provides a convincing argument and some calculated areas from GIS, but then this puts into question the areal measurements provided here initially, especially here where the ND area is almost 4 times greater than the BD area. I would suggest using BNA range maps and GIS analysis to determine these numbers for all marshbird species. For RTLO, one can clearly see that the BD is much greater than the ND. These present numbers will need to be changed or explained.

+Added explanation on inclusion of Eberl's calculations. Please note that non-breeding is not equivalent to "wintering" range. Non-breeding includes all areas where non-breeding birds are found and generally corresponds to the species' entire range of occurrence since migrating, "wintering" and/or subadult birds are generally found throughout the species' range.

Citations

Brand, C. J., R. M. Duncan, S. P. Garrow, D. Olson, and L. E. Schumann. 1983. Waterfowl mortality from botulism type E in Lake Michigan: an update. Wilson Bull. 95: 269-275.

Dickson, D.L. 1992. The Red-throated Loon as an indicator of environmental quality. Can. Wildl. Serv. Occas. Pap. no. 73.

Forsell, D. J. 1999. Mortality of Migratory Waterbirds in Mid-Atlantic Coastal Anchored Gillnets During March and April, 1998. Unpub. rep. to USFWS, Annapolis, MD.

+Added above information to profile

+Other than Eberl's 3/7 email, no other comments/rebuttals received during March 2006 review of Canadian review team's proposed changes. Canadian review team's comments integrated into profile.

Christine Eberl

Emailed to Jennifer Wheeler 3/7/2006

Christine.Eberl@ec.gc.ca

I have taken a look at the proposed changes to the RTLO assessment and have a few comments to make. First is the section on Population size. When I checked out the chart in the material sent in early February, the ranking for PS was given as either a 3 or a 2. I see that the proposed changes in the assessment for RTLO you refer to below gives a PS final ranking of 3. I believe this ranking of 3 more accurately reflects what their numbers are currently at. For Threats to Non-Breeding, I would agree with the ranking of 5 which was recommended by the Canadian team, as the threat of bycatch is real and documented, not just potential.

Both the Breeding Distribution and the Non-Breeding Distribution contains comments for the Marshbird Workshop of 2005, that iced areas should be removed from the estimates. For the Breeding Distribution, I don't think this will make much of a difference. However, for the Non Breeding Distribution, abiding the additional comment suggesting that a GIS analysis including only waters to a depth of 50 m be done, would likely significantly reduce the NB area and resulting rank. (Incidentally, where did this 50 m depth come from? The BNA account cites a distance of 'within 0.5 km of coast (but up to 2 km), in waters colder than 16.7 degrees C, but I've never seen a 50 m depth preference anywhere).

+Comment about removing iced areas and GIS analysis re-worded (was a small notation by the break-out group at the Oct 15 workshop - John Stanton, Doug Forsell, Ken Morgan, Gary Nuechterlein).

There's also another consideration to keep in mind. - In an email I sent to Katharine, and cc'd to you in August, I had made the suggestion that the ND MAY possibly be changed from 2 to a 3 rank (where it is now). This was based on the description from the 'assessing factor scores' text of the ND to 'in some cases' include breeding area. The rank of 3 includes breeding area, as non-breeding adults of breeding age can be observed inland as floaters seeking territories. But adults not yet of breeding age remain at sea. I'm not sure what 'cases' would have the breeding area included in the ND (as I had stated in my August email, but if nesting area should not be included in this case, then the ranking for ND should be listed as 2.

+ND clarified: In summary, ND is essentially a metric of range in North America, and BD is a component of that that highlights the relatively limited areas of actual nesting.

Arctic Loon

Ron Bazin (Canadian review team)

emailed to Katharine Parsons, 14 Nov 05

Ron.Bazin@EC.GC.CA

This species breeds mainly in Siberia, N Europe & Asia (& possibly some breeding in NW Alaska). Their status in Canada consists of incidental observations of non-breeding visitors in British Columbia (Tkachuk 2002; Godfrey 1986). Hersey (1917) conducted an assessment of the status of *Gavia arctica* as a North American bird and concluded, based on careful examination of specimens that all but three specimens collected in Alaska referred to another species. Based on these findings I suggest that the information in Wings over Water (2003) stating the Canada is responsible for 50-70% of the North American population & 30-50% of the global population is incorrect & that this species should be removed from the WOW document.

Citations

Godfrey, W. Earl. 1986. The Birds of Canada. Nat. Mus. Nat. Sciences. Pg: 21
Hersel, F.S. 1917. The status of the Black-throated Loon (*Gavia arctica*) as a North American Bird. The Auk. Vol. 34 No. 3: 283-290
Tkachuk, R. 2002. A probable Arctic Loon sighting in British Columbia. British Columbia Birds Vol 12: 10-13

+Added above information to profile

Pacific Loon

Ron Bazin (Canadian review team)
emailed to Katharine Parsons, 14 Nov 05

Ron.Bazin@EC.GC.CA

Population Trend

Population declined by approximately 70% 1992-2005 on Victoria Island, Northwest Territories, Canada (CWS- Dickson, unpub data).

Population Size

This estimate was derived at based on expert opinion at a workshop (D. Evers, pers comm.) using population densities & extrapolating to the area of the North American range. This method has been used by partners in flight to determine population estimates for territorial songbirds using BBS data (http://www.iafwa.org/bird_conservation/pif_users_guide.htm#Population_estimates). However ground-truthing is recommended for this type of an exercise for a species such as Pacific Loon where information on population status and population indices is lacking for much of their range.

“the survey done to obtain this number was done in 1979”

+Above information added to Russell 2002

PS=1 is Ok. It is likely given the extensive area of the range for this species that there are more than 832,000 individuals.

Threats to Breeding Populations

After fledging, family groups move from freshwater nesting areas to marine waters in preparation for migration and would be vulnerable to potential pollution from offshore petroleum exploration and development (Sinclair et al., 2003)

+Above information added to profile

Citations:

Sinclair, P.H., W.A. Nixon, C.D. Eckert and N.L. Hughes. 2003. Birds of the Yukon Territory. UBC Press, Vancouver. 595 pp

+Above information added to profile

Common Loon

David Evers
emailed to Katharine Parsons Thursday, September 08, 2005

david.evers@briloon.org

+Added the following citation: Evers, D. C. 2004. Status assessment and conservation plan for the Common Loon (*Gavia immer*) in North America. U.S. Fish and Wildlife Service, Hadley, MA.

+Added the following to PS: "607,011 to 634,701" (Evers 2004)

+Added the following to TB: Shoreline development increases loon predators such as raccoons, gulls, corvids...collisions with motorboats in open water...habitat changes resulting from acid rain...disease, esp. aspergillosis...(Evers 2004)

+Added the following to TN: Bycatch from commercial gillnetting ...disease, esp. emaciation syndrome...(Evers 2004)

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

Common Loon: threats to nonbreeding populations: disease (botulism and other organisms) is a major continuing problem for migrant loons on the southern Great Lakes in autumn migration with thousands dead in several of the past ten years.

+ Added comment to TN

Ron Bazin (Canadian review team)

emailed to Katharine Parsons, 14 Nov 05

Ron.Bazin@EC.GC.CA

Population Trend

"except for a few local or regional instances, available data indicates that Common Loon populations are stable or increasing through most of their Canadian range" (Scheuhammer et al. 2003)."

"overall population healthy and robust" and "results from winter counts indicate a steady increasing trend in the number of loons and long-term recovery in the overall breeding population since the mid-1900's" (Evers 2004).

Over 94% of the continental Common Loon population resides in Canada (Evers 2004). Thus the Common Loon is stable or increasing through most of their continental range.

+Above information added to profile

Given that the Common Loon is considered either stable or increasing in Canada the PT score should be a 2 or a 3.

+Marshbird workshop agreed to PT=3

Citations:

Scheuhammer, A.M., Money, S.L., Kirk, D.A., and Donaldson, G.(2003) Lead fishing sinkers and jigs in Canada: Review of their use patterns and toxic impacts on Wildlife. Canadian Wildlife Service Occasional Paper Num 108.

+Above information added to profile

Yellow-billed Loon

Michael North

emailed to Katharine Parsons Friday, September 09, 2005

michael.north@dnr.state.mn.us

I agree with the scores that have been assigned for Population Trend (3), Population Size (3), Threats to Non-breeding Populations (4), Breeding Distribution (4), and Non-breeding Distribution (4).

+Changed PT factor score from "3?" to 3

I would note regarding Threats to Non-breeding Populations that recent satellite tracking shows that the Alaska North Slope population migrates westward to wintering ranges off the coasts of Japan, the

Koreas and China. (For more information on this please contact Joel Schmutz at the Alaska Science Center at 907-786-3518). The Yellow Sea, home to 10% of the world's human population, is one of the worlds most threatened marine areas from pollution, reduced river flows, coastal mudflat reclamation, and overfishing.^{1,2,3,4,5}

+Added quotes about non-breeding distribution and threats in the Yellow Sea to TN

I disagree with score for Threats to Breeding Populations (draft TB score = 3). I would give the score a 5 based on two major factors: global warming and inadequacy of existing regulatory protections.

+Changed TB factor score to 5

Global warming is a particular threat to the integrity of the permafrost which supports and maintains yellow-billed loon breeding habitat. The Wildlife Society (2004)⁶ points out 1) that large-scale thawing of ground ice in Siberia has already occurred, altering the landscape (p.8), 2) rapid coastal erosion is already occurring along the Beaufort Sea coast in Canada and Alaska (p.8), and 3) that loss of lowland breeding habitat on river deltas and coasts is likely to occur, due to rising sea levels and erosion (p.12). Smith et al. (2005)⁷ more ominously document that 125 lakes (1.15%) disappeared completely and another 1045 lakes (9.6%) out of 10,882 lakes) greater than 40 ha in size shrank to less than 40 ha in a study area in Siberian between 1973 and 1997-8; and total regional lake surface area decreased 6%. These losses are attributed to permafrost degradation, in which lakes experience subsurface drainage as the permafrost disappears. These authors also cite examples of this phenomenon occurring near Council, Alaska, at the periphery of the yellow-billed loon range. Although lake losses have only been documented where permafrost is discontinuous, it is not difficult to foresee this occurring where now-continuous permafrost may degrade in the future. Indeed, one recent news article⁸ has suggested that the recent unprecedented thaw of a vast expanse of western Siberia could represent an irreversible tipping point in the acceleration of global warming.

The inadequacy of existing federal regulatory mechanisms for protecting yellow-billed loons came to light during the NEPA process for opening the National Petroleum Reserve in Alaska (NPR-A). The entire NPR-A, home to about 80% of yellow-billed loons in Alaska, is proposed to be leased for oil and gas development with virtually no protections formally agreed to for yellow-billed loons. Even though on-the-ground development in the NPR-A has not occurred, approval for it has; thus I consider that a "known threat actually occurring and can be documented" (i.e., score=5). In addition, oil development is occurring on the Colville River delta, which is a known concentration area. With oilfield development comes the potential for loon predator populations to increase, particularly glaucous gulls, ravens, and arctic foxes but possibly also jaegers, red foxes and coyotes (score=4). Also with oilfield development comes the certainty that there will be multiple releases of contaminants into the ecosystem through accidental spills; the only uncertainty is the frequency and extent to which the spills will occur (score=5).

I would like to close by excerpting comments I made to BLM on March 14, 2003, regarding the draft EIS on opening the northwest planning area of NPR-A:

"Lastly, in all of the reviews⁹ I have done of draft status assessments on yellow-billed loons, I have resisted advocating that they be listed as a threatened or endangered species. In my opinion, even though yellow-billed loons are a very rare species, there had been no credible threat to their population or habitat – until now I am afraid. The species is a long-lived habitat specialist, with a low reproductive rate, and an inherent potential to bioaccumulate contaminants, which makes it a prime candidate for a species at risk. I am particularly troubled by evidence that previous recent leases of oil and gas in the NPR-A have ignored mitigation proposed by wildlife professionals, and have not included any safeguards for yellow-billed loons. To me, that demonstrates the inadequacy of existing regulatory mechanisms. Combine that with the present potential¹⁰ to threaten destruction or modification of the species habitat, the potential for increased predation, and the potential to introduce long-term and large-scale contamination of the species habitat (i.e., other man-made factors) and you have met four of the five criteria – any one of the which – that may be used for listing under the Endangered Species Act (16 U.S.C. 1533(a))."

¹NOAA's account for the Large Marine Ecosystem 48: Yellow Sea. Online at: na.nefsc.noaa.gov/lme/text/lme48.htm.

²Barter, Mark. Shorebirds of the Yellow Sea: Importance, threats and conservation status. Department of the Environment and Heritage, Australian Government. Online at: www.deh.gov.au/biodiversity/migratory/waterbirds/yellow-sea/chapter6.htm.

³Yellow Sea Coast. Online at: www.birdlife.org/science/species/asia_strategy/pdf_downloads/wetlandsWO6.pdf.

⁴State of the Environment, China '97. Water Environment. Online at: www.zhb.gov.cn/english/SOE/soechina_1997/water/waters1.htm.

⁵All of the above references can be readily found by doing a Google search on "Yellow Sea" and "pollution".

⁶The Wildlife Society. 2004. Global Climate Change and Wildlife in North America. Technical Review 04-2.

⁷Smith et al. 2005. Disappearing Arctic Lakes. *Science* Vol. 308, Issue 5727.

⁸Ian Sample. Warming hits tipping point. *The Guardian*. August 11, 2005.

⁹There had been four at the time: the U.S. Fish and Wildlife Service status assessment, the Canadian COSEWIC review, one for the Wilderness Society and Trustees for Alaska, and one for the Tongass NF.

¹⁰This is not a "potential" any more, but a concrete proposal that has been approved by BLM.

Michael North
emailed to Katharine Parsons October 6, 2005
michael.north@dnr.state.mn.us

Thank you for sharing this information. I have a few comments, for what they are worth. In looking at the overall scheme of species rankings, I can't agree that the yellow-billed loon is at any lower risk than the common loon and/or red-throated loon. (I qualify this, based on not knowing what the red-throated loon population trend is). I factor into this equation also the fact that the yellow-billed loon has been petitioned for listing under the Endangered Species Act (none of the other loons have), and I understand this petition received a favorable endorsement from the Alaska Region of the USFWS, though offices in DC have not acted on it yet.

+Thanks very much for sending your comments on the ranking of loons. Your thoughts on this are exactly the kind of discussion we're hoping to have at the marshbird workshop where all species profiles will undergo a second round of expert review and, importantly, a calibration of sorts, to identify any rankings that misfired for one reason or another.

+Marshbird Workshop agreed to High Concern designation for YBLO

Ron Bazin (Canadian review team)
emailed to Katharine Parsons, 14 Nov 05
Ron.Bazin@EC.GC.CA

This species was listed as "IL" (information lacking) in the Canada's Waterbird Conservation Plan (Milko et al. (2003). Given the paucity of information it may be more prudent for the continental assessment to also be information lacking.

We overall as a group of marshbird experts will have to make some more difficult decisions concerning whether a species should receive a category score based on very lacking and sparse information for only a very few small areas of the range, or whether the species should receive an "Information lacking" category which would (and should) raise greater concerns for that species likely than would a Moderate Concern category. The Moderate Concern category is somewhat misleading in that it indicates that we have some degree of knowledge for the various factors for this species, which is not necessarily true. As a comment for the assessment scoring system, there should be some criteria set up to assist in determining whether a species can be formally assessed or whether it should fall into the Information lacking category (e.g. for PT or PS factors, present data available for only very small percent (e.g. 5%) of overall breeding range), and other similar qualifiers for the other factor scores. This would help in making more uniform and objective decisions regarding the Information lacking category.

+this is an important issue for us to address in the next year or so as we review and revise waterbird status assessment. Currently, our protocol prohibits us from ranking a species if both PT and PS are unknown, but we have not been explicit about what "unknown" means. At a continental scale, there is some value in ranking as many species as possible since it is a broad-scale judgment that often as not is based on very incomplete information on all but a few species.

Population Trend

"there are not sufficient data to estimate the world of Canadian populations" and "no adequate data exists for reliable trend estimates" Barr (1997)

Systematic aerial surveys on northwestern Victoria Island, Canada in 1992 - 1994 and in 2004 and 2005 suggest that the population has not substantially changed in the last decade (Lynne Dickson, CWS Prairie and Northern Region, unpublished data).

"no evidence of a long term trend in Yellow-billed Loons of the 18 year Arctic Coastal Plain Survey or the 12 year North Slope Eider Survey" (Earnst 2004)

+Above information added to profile

This was changed to a 4 by marine group at the Workshop – Canadian review unable to come up with a trend score due to lack of information – as per comment above, this species could receive an "Information Lacking" category since a lot is unknown about the species unless Marine group can provide evidence to support a PT score of 4.

+Marshbird workshop agreed to PT=4 based on the Marine Breakout group's comment: "apparent population decline because extirpated from part of range."

Population Size

16,000 in North American; 6,024 in Alaska and 9,975 in Canada (Earnst 2004)

+Above information added to profile

Threats to Breeding Populations

"most of northern Alaska's Yellow-billed Loon population (91%) occur on the National Petroleum Reserve-Alaska, virtually all of which is open or proposed to be open to development" (Earnst 2004)

+Above information added to profile

There is no evidence to suggest that these threats are actually known to occur; threats are listed as "potential threats" by Earnst (2004), Fair (2002. Status and Significance of the Yellow Billed Loon Populations in Alaska) Barr (1997), and North (1994).

+Marshbird workshop agreed to TB=5;will engage marshbird network in further discussion of this species in early 2006

Citations:

Barr, J.F. 1997. COSEWIC Status Report on Yellow Billed Loon (*Gavia adamsii*). Committee on the Status of Endangered Wildlife in Canada, Ottawa, ON.

Earnst, S.L. 2004. Status Assessment and Conservation Plan for the Yellow-billed Loon (*Gavia adamsii*). U.S. Geological Survey, Scientific Investigations Report 204-5258, 42 p.

+Above information added to profile

Iain J. Stenhouse

Emailed to Jennifer Wheeler 3/2/06

istenhouse@alaska.net

THREATS TO BREEDING

Regarding your species assessment for the YBLO: Given the number of YBLOs in Alaska and the extent of overlap between their breeding range and NPR-A, and the recent ROD which opened NPR-A in its entirety to oil exploration and further development, I believe it would be prudent to retain their Threats to Breeding Populations (TB) score as 5 (and not reduce it to 4).

+Changed to 5 based on Conservation Agreement provided by North.

Michael North
Emailed to Jennifer Wheeler 3/3/2006
michael.north@dnr.state.mn.us

Regarding proposed changes to Yellow-billed Loons: Having only reviewed one species in detail, it is difficult for me to judge whether the TB Factor Score should be a 4 or 5 **while being consistent with other species**. You will have to make an executive decision on that matter. However, I did offer specific reasons for my initial recommendation. Did the team from Canada offer rationale for their recommendation? Attached is a draft Conservation Agreement for yellow-billed loons authored by Alaska resource agencies that may inform your decision. I note on p. 6 at the end of the first paragraph under Conservation Concerns that the authors write, "... these threats are occurring or expected to occur and may have substantial effects on YBLO in Alaska."

Attached the Conservation Agreement for the Yellow-billed Loon (*Gavia adamsii*.) Draft for Public Review and Comment, February, 2006

+Canadian Review Team retracted their suggestion for the TB factor change from 5 to 4 as authors of Conservation Agreement make the case for actual occurrence. Citation added to document.

PODICIPEDIDAE

Least Grebe

Pied-billed Grebe

Christopher Rustay
emailed to Jennifer_A_Wheeler; Katharine Parsons Thursday, August 25, 2005
christopher.rustay@pljv.org

1) Note if the individual PT score and others are based primarily on the "north of Mexico" range or are indeed range-wide. The PT score justification quotes provided only deal with that northern portion of the Grebes range.

2) *IF* you are going to include BBS data with PT justification(as with AMCO), include BBS data for every species where a trend has been published on the BBS website, even if you have no confidence in the sampling. It is inappropriate to use BBS to bolster your score for one species and not use it for another, if they are essentially sampled in the same manner for both species (Unless there is a % of range question that isn't addressed in the PBGR justification section). NOTE that BBS doesn't sample the entire breeding range of either of these species. Also the BBS site now has data including an additional 5 years beyond 1999.

+ Comments regarding PBGR: The PT justification is based not only on northern birds, but on the entire subspecies of podiceps (ie Canada to Panama) and antarcticus (Panama south). The only subspecies for which we have no trend info is antillarum (West Indies). Your

comment regarding BBS data is an important one. In these draft profiles, we have included information on BBS when the source authors have used or critiqued species-specific BBS data. As you noted, BBS does not cover the plan area so the data are partial for our purposes to begin with. Furthermore, we have an assessment from John Sauer that indicates BBS data are highly inadequate for 15 species of marshbirds found within the BBS portion of the plan area. BBS appropriately samples only AMCO of a list of marshbirds including American Bittern, Common Loon, Pied-billed Grebe, Sora, Sandhill Crane, Red-necked Grebe, Common Moorhen, Horned Grebe, Clapper Rail, King Rail, Eared Grebe, Virginia Rail, Least Bittern and Purple Gallinule. Data deficiencies include low and very low abundances (<1 bird/route; <0.1 bird/route), imprecise and very imprecise estimates, temporal variation in trend, and small sample size. We don't have a "blanket" policy with regard to use or reporting of BBS data, because the ecology of these species and BBS coverage is different enough that data for each species must be evaluated individually. If an expert believes BBS data are useful to estimate individual species's population attributes, we include their rationale and conclusions.

Martin Muller

emailed to Katharine Parsons September 22, 2005

martinmuller@msn.com

I've had a chance to seriously consider the Pied-billed Grebe status assessment report. Overall I agree with the draft factor scores. Following are my detailed comments.

Header: *Podilymbus podiceps* rather than *Porphyrrio podiceps*

+ *Made change*

Population Trend

A PT Factor Score of 3, in my opinion paints too optimistic a picture. Given "strong numerical decline" and "loss of breeding and wintering habitat" I think a factor score of 4 is likely to be more accurate.

+ *Changed PT to 4 as suggested*

Breeding and Non-breeding Distribution.

I don't think the scores would change, but is the non-breeding area actually the same size as the breeding area? With part of the population vacating areas where fresh water habitat freezes, shouldn't the winter area be smaller?

+ *See Assessment process protocol for BD and ND*

References:

"Jehl 2001" mentioned under Population Size is missing from references, so I cannot assess relevance of this reference for Pied-billed Grebes.

+ *Jehl 2001 is referenced by Delany and Scott 2002*

Ron Bazin (Canadian review team)

emailed to Katharine Parsons, 14 Nov 05

Ron.Bazin@EC.GC.CA

Population Trend

Declining populations in several northeastern states (Gibbs and Melvin 1992).

Although regional, results from the Great Lakes Marsh Monitoring Program show a population decline in the Great Lakes region over the past 10 years (-7.5%/year, $p=0.00$)(Archer and Timmermans 2004).

Preliminary data from the second Ontario Breeding Bird Atlas suggest that this species would be widespread throughout the province and has been located in many more atlas squares than during a similar effort conducted 20 years ago.

BBS trend not reliable for this species.

+*Above information added to profile*

I believe that we have insufficient reliable data on population trend and population size to have a good assessment for this species. I presume it would not be easily accepted to have this species listed as “Information lacking”.

We overall as a group of marshbird experts will have to make some more difficult decisions concerning whether a species should receive a category score based on very lacking and sparse information for only a very few small areas of the range, or whether the species should receive an “Information lacking” category which would (and should) raise greater concerns for that species likely than would a High Concern category. The High Concern category is somewhat misleading in that it indicates that we have some degree of knowledge for the various factors for this species, which is not necessarily true. As a comment for the assessment scoring system, there should be some criteria set up to assist in determining whether a species can be formally assessed or whether it should fall into the Information lacking category (e.g. for PT or PS factors, present data available for only very small percent (e.g. 5%) of overall breeding range), and other similar qualifiers for the other factor scores. This would help in making more uniform and objective decisions regarding the Information lacking category.

+this is an important issue for us to address in the next year or so as we review and revise waterbird status assessment. Currently, our protocol prohibits us from ranking a species if both PT and PS are unknown, but we have not been explicit about what “unknown” means. At a continental scale, there is some value in ranking as many species as possible since it is a broad-scale judgment that often as not is based on very incomplete information on all but a few species.

Breeding and Non-breeding Distributions

Similar comment as the one made by Martin Muller (emailed to Katharine Parsons September 22, 2005) regarding Breeding and Non-breeding Distribution. Why is the non-breeding area actually the same size as the breeding area? The north American breeding and non-breeding distribution are not the same as per Muller et al. 1999 (BNA account). With part of the population vacating areas where fresh water habitat freezes, shouldn't the winter area be smaller? Should not the entire non-breeding range that includes South America be included in the assessment?

*+Please note that non-breeding is not equivalent to “wintering” range. Non-breeding includes all areas where non-breeding birds are found and generally corresponds to the species' entire range of occurrence since migrating, “wintering” and/or subadult birds are generally found throughout the species' range. All range calculations are based on the spatial context of the North American Waterbird Conservation Plan (Canada to Panama). Therefore, species' ranges **within the plan area** are evaluated—NAWCP does not evaluate the risk of population loss contributed by global ranges of various sizes. Evaluation is restricted to the delineated plan area, since this is the area to which the waterbird initiative has committed to protecting waterbird biodiversity.*

Citations:

Archer, R.W. and S.T.A. Timmermans. 2004. The Marsh Monitoring Program annual report, 1995-2004: annual indices in bird abundance and amphibian occurrence in the Great Lakes basin. Unpublished report by Bird Studies Canada.

Gibbs, J.P. and S. M. Melvin. 1992. Pied-billed Grebe, *Podilymbus podiceps*. Pp. 31–49 in Migratory nongame birds of management concern in the Northeast (K. J. Schneider and D. M. Pence, eds.). U.S. Dep. Inter., Fish and Wildl. Serv., Newton Corner, MA.

+Above information added to profile

Horned Grebe

Stephen Stedman

emailed to Katharine Parsons Tuesday, September 13, 2005

SStedman@ntech.edu

I have reviewed the HOGF profile with its assessment scores that you sent via attachment, and I find that these summarize the conservation status of HOGF in North America well. If there is any

change to be made in the profile, it might be to change the draft TN Factor Score from 4 to 5. Documented concentrations of lethal pesticides have been found in individual HOGs from widespread wintering sites, and documented losses from oil spills have occurred at several sites, so these threats have occurred in the past (and are likely to continue in the future); these are not just potential threats, though the degree to which they are occurring is unknown and may be small.

+Changed profile TN to 5 as suggested

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

Comments from Horned Grebe account “data from BBS routes of limited usefulnessareas of densest breeding cannot be reliably determined from BBS data” also applies to this species which is not often seen on drive-by surveys.

+Added comment about limited usefulness to PT

Horned Grebe: another threat to non-breeding populations on the Great Lakes (especially Lakes Michigan and Erie) is disturbance of staging areas by sport fishing boats and jet skis.

+Added threat to TN

Ron Bazin (Canadian review team)

emailed to Katharine Parsons, 14 Nov 05

Ron.Bazin@EC.gc.ca

Population Trend

BBS data survey-wide analysis shows a significant long-term (1966-2004) decrease of 3.5% per year (Sauer et al., 2005)

In a population study near Yellowknife in the Northwest Territories from 1986 to 2002, there was a slight non-significant decrease in the yearly abundance of adult Horned Grebes during the breeding season. During the same time period, there was a greater reduction in productivity, as measured by the average number of adults and young counted during July and August surveys and the number of ponds on which broods were raised (CWS unpub. data)

+Added above information to profile

Population Size

I would suggest a PS factor score of 2, as the few population estimates seem to have the numbers more solidly within the 2 range than the 1 range, which seems on the high side.

+Marshbird Workshop agreed to PS 1-2; will engage marshbird network in further discussion of this species in early 2006

Threats to Breeding Populations

“Within North America, degradation of breeding sites results mainly from agricultural activities (e.g., mowing of lacustrine vegetation in dry years, eutrophication of aquatic sites resulting from build-up of fertilizers, and pesticide build-up ...”

+Added above information to Stedman 2000 information

Threats to Non-breeding Populations

“... deserves same status throughout winter range along coasts, especially in se. U.S.... Extensive North American winter range probably prevents catastrophic losses from isolated spills...seasonal mortality from fishing nets substantial in Iceland...” Not much evidence fishing net mortality occurring in N.A., though it may be a problem.

+Added above information to Stedman 2000 information

Although Stedman suggested increasing this score to a 5 because of documented pesticide levels and losses from oil spills, he also states that the degree to which these are occurring is unknown and may be small – this brings up the many problems with the Threat factor score not allowing for issues of scale and degree. Problems potentially not widespread so may not merit a 5.

+Marshbird Workshop agreed to TN=5; will engage marshbird network in further discussion of this species in early 2006. Also, the upcoming revision of assessment process will address the issue of standardizing threats estimation;

Breeding and Non-breeding Distributions

In looking at the BNA for HOG, it is hard if not impossible to imagine that the ND is larger than the BD. The question remains as to what range maps are being used here, and how are the estimates being done. As mentioned in the RTLO assessment, rather than comment on these numbers and scores, the Canadian position on these is that they be reevaluated, possibly using BNA range maps or some similar standard maps across species, and using GIS analysis if this wasn't used for these estimates. All methods used to calculate these estimates should be documented and referenced.

+Please note that non-breeding is not equivalent to "wintering" range. Non-breeding includes all areas where non-breeding birds are found and generally corresponds to the species' entire range of occurrence since migrating, "wintering" and/or subadult birds are generally found throughout the species' range.

Citations

Sauer, J. R., J. E. Hines, and J. Fallon. 2005. *The North American Breeding Bird Survey, Results and Analysis 1966 - 2004. Version 2005.2.* [USGS Patuxent Wildlife Research Center](#), Laurel, MD

+Added above information to profile

+No comments/rebuttals received during March 2006 review of Canadian review team's proposed changes. Canadian review team's comments integrated into profile.

Red-necked Grebe

Gary L. Nuechterlein

e-mail to Jennifer_A_Wheeler Saturday, September 17, 2005

Gary.Nuechterlein@ndsu.nodak.edu

I looked over the factor scores for the Red-necked Grebe and found them to be quite reasonable. I found myself also wavering between 3-4 for the PT.

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

Red-necked Grebe: small expansion of breeding range noted in S Ontario (current Ontario Breeding Bird Atlas in prep.) and West Central Minnesota where some expansion out onto the prairie currently underway (pers. obs., 2004 & 2005).

+Added info to PT

Ron Bazin (Canadian review team)

emailed to Katharine Parsons, 14 Nov 05

Ron.Bazin@EC.GC.CA

Population Trend

It is estimated that greater than 70% of the population resides in Canada and has been designated "Not at Risk" by the Canadian Waterbird Conservation Plan. (Milko et al. 2003). BBS and CBC data indicate the population is either stable or increasing in Canada. Low if PT=2 and Moderate if PT=3.

+Interim category placement is Moderate—High Concern; will engage marshbird network in further discussion of this species in early 2006

Population Trend

Canadian BBS trends (Sauer et al. 2005) indicates the population has been stable over the last 20 years (acknowledging the limitations of BBS for this species)

Analysis of the last 25 years CBC data for Canada and the US (National Audubon Society 2005) suggests the population may be increasing.

The number of breeding Red-necked Grebes in Northwest Territories from 1986 - 1996 appeared stable (Fournier and Hines 1998).

In a population study near Yellowknife in the Northwest Territories from 1991 to 2003, there was a slight non-significant ($p=0.3$) increase in the yearly abundance of adult Red-necked Grebes during the breeding season. During the same time period, there was a slight non-significant reduction in productivity, as measured by the average number of adults and young counted during July and August surveys ($p=0.4$) and the number of ponds on which broods were raised ($p=0.2$) (CWS unpub. data)

+Added above information to profile

There is no data to suggest that the population is decreasing in Canada. Except for a few local or regional instances, available data indicates that Red-necked Grebe populations are stable or increasing in North America. As Canada has >70% of N.A. population, additional weight should be give to Canadian data.

+Interim category placement is Moderate—High Concern; will engage marshbird network in further discussion of this species in early 2006

Threats to Breeding Populations

Most of the threats identified in the BNA are potential threats. There is no evidence to suggest that these threats could result in a significant potential risk to the population. No potential threats have been identified in the Northwest Territories where the “breeding population appears to be a significant component of the national (Canadian) population for this species (Fournier and Hines 1998).

+Marshbird Workshop agreed to TB=4; Interim category placement is Moderate—High Concern; will engage marshbird network in further discussion of this species in early 2006

Threats to Non-breeding Populations

Most of the threats identified in the BNA are potential threats. There is little to evidence to suggest that these threats could result in a high potential risk to the population. We would consider leaving this score as a 4, and would ask if the Marine group could provide any documented evidence to suggest that it should be a 5 (proof of the scale and extent/impact that gill-nets and other threats are having on this species.)

+Marshbird workshop agreed to TN=5 based on the Marine Breakout group's comment: “gill net mortality (potential threat) in BNA.” Interim category placement is Moderate—High Concern; will engage marshbird network in further discussion of this species in early 2006

Citations:

Fournier, M. A. and Hines, J. E. 1998. Breeding Ecology and Status of the Red-necked Grebe *Podiceps grisegena*, in the Subarctic of the Northwest Territories. Canadian Field-Naturalist 112(3):474-480.

National Audubon Society (2005). The Christmas Bird Count Historical Results [Online]. Available <http://www.audubon.org/bird/cbc>

Sauer, J. R., J. E. Hines, and J. Fallon. (2005). The North American Breeding Bird Survey, Results and Analysis 1966 - 2004. Version 2005.2. USGS Patuxent Wildlife Research Center, Laurel, MD

+Added above information to profile

+No comments/rebuttals received during March 2006 review of Canadian review team's proposed changes. Canadian review team's comments integrated into profile.

ARDEIDAE

Pinnated Bittern

GISSELLE ALVARADO QUESADA

emailed Katharine Parsons Monday, August 22, 2005

octrop@racs.co.cr

Population Trend (PT).

DRAFT PT Factor Score: to me 0. (Significant unknowledge about Population Trends).
 Although it is thinking species distribute along lowlands of both slopes in Costa Rica (pacific and Atlantic) in particular at North of the Caribbean, it specie it is really very hard to see. Two years ago we were able to see a pair in Sarapiquí lowlands. Probably most of our Pinnated Bittern are close to the border with Nicaragua, but by unfortunate, for the civil war at Nicaragua several years ago, almost nobody can go there. There are a lot of old explosive in the earth. "Sandinistas" (people from Nicaragua) putted there. There are many wetlands, swamps, and marshes, but very dangerous places. In conclusion, its habitats are the best for Pinnated Bittern, but since at least 25 or more years ago it is unexplored area. And at the rest of the country the species it is very rare and secretive.

Population Size (PS).

DRAFT PS FACTOR SCORE= ?.
 To me the case it is like the anterior case. We have not parameter to evaluate the population size due to our unknowledge.

Threats to Breeding Populations (TB) and No Breeding Populations.

To it specie breeding and not breeding are the same.
 DRAFT TB FACTOR SCORE=?

Here I think it is an intermedium between 4 and 5: Significant potential threats exist, but have not actually occurred and 5: Probably some of them have already occurred but we cannot test, because we cannot there. But one important thing it is some pine apple (piña) are developing close to the Nicaragua border and chemical contaminants can go there. Other thing is the drainage, many swamps in others potential parts of the country are drained and habitat of Pinnated Bitter can disappear. Only thing is we cannot see them.?????

+Changed TB factor score to 4

+Changed TN factor score to 4

Breeding distribution (BD) and Non-breeding Distribution.

Just a suggestion, probably the plan area is about 524,500 Km, estimated from range maps. However to Costa Rica distribution it is not real, At least from our thinking distribute along lowlands from both slopes, not more than 600 ms.sn (ms above the sea), in the map you sent me, appear that heron distribute along all country and that's wrong. I know Costa Rica it is very small just 50;000 km square (so for Costa Rica may be distribution is 20,000 km square). However my suggestion is try to check other countries distribution.

+ When country reports are completed by Central and South American partners, we'll be able to revisit this

American Bittern

Socheata Lor

e-mail to Katharine Parsons Friday, September 16, 2005

Socheata_Lor@fws.gov

Here are my comments (with consensus from Gary Huschle who has been overseeing the AMBI project at Agassiz NWR for the past 10-12 years) on the American Bittern Conservation Status as per their factor score:

PT: OK

PS: I have a problem with the population estimate but don't have data to back up my gut feeling---just seems very high. Densities: i checked with Gibbs et al. 1992 and WI density was "40 (+/- 20 SE) calling males/100 ha" --not sure if the reported "20/100 ha" takes into consider the 20 SE. Basically, i'm uncomfortable with the Factor Score of 1, but don't have any grounds to guess any other number?

+Changed PS to 2 based on expert opinion

+Changed "20 calling males/100 ha" to "40 calling males/100 ha" per Gibbs et al. 1992

TB: Gary and i agree that the Factor Score for this **should be 5** instead of 4 based on habitat status and conditions.

+Changed TB to 5 based on expert opinion

TN: Again, Gary and i agree that Factor Score for wintering ground should also be 5 given the decline and deterioration of wintering habitats, esp. coastal habitats and the Everglades (where we know birds from MN winter from satellite-tagged birds).

+Changed TN to 5 based on expert opinion

BD: OK

ND: OK

Osvel Hinojosa-Huerta

emailed Jennifer_A_Wheeler Wed 9/28/2005

osvel@email.arizona.edu

For the other species, I don't have much to add, I think that the scores are adequate. I will just add that Virginia Rails and American Bitterns breed in the Ciénega de Santa Clara in Sonora;..., and American Bitterns are rare, with only about a dozen pairs per year, with some years where there is no breeding detected.

Ron Bazin (Canadian review team)

emailed to Katharine Parsons, 14 Nov 05

Ron.Bazin@EC.GC.CA

American Bittern in Canada

Conservation Concern Status Assessment– Canada=High (PT=4, TB=5)

Population Trend: PT=4

Canada

High (possible moderate decline)

BBS 1968-2004(Canada): -3.3,(-4.81- -1.7) N=434 routes

BBS 1994-2004 (Canada): -3.2 (-6.9- 0.6) N=291 routes

CBC: No data

Population Size: PS=IL

Information lacking

BBS-low detection rates

Threats to Breeding Populations: TB=5

Habitat loss/degradation

Human disturbance

Invasive plants

Contaminants

Collisions/road kills

Natural factors

Lack of breeding information, population status, threats, conservation measures, inaccessible habitat

Wetland fragmentation and degradation reduced suitable breeding areas. Similar to other marshbirds, species breeds in range of wetland sizes, but prefers wetlands >10 ha (Gibbs et al. 1992).

Threats to Non-breeding Populations: TN=IL

Information lacking

Non-breeding population – migratory routes/wintering locations unknown

Breeding Distribution: BD=IL

50% of N. Amer. breeding range in Canada

May have extensive range but breeding distribution limited to limited and continued loss of large wetlands/marshes

Non-breeding Distribution: ND=IL

Non-breeding population restricted due to habitat quality and availability
Aerial extent of habitat unknown

Literature Cited:

Gibbs, J.P., Melvin S. and Reid F.A. 1992. American Bittern (*Botaurus lentiginosus*). In *The Birds Of North America*, No.18 (A.Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA. Pp: 2-9.

Least Bittern**Scott Rush**

emailed to Katharine Parsons Monday, September 12, 2005

rushs@owl.forestry.uga.edu

For the least bittern assessment:

Here too, I don't have much field experience with least bitterns outside of the Gulf Coast but based on the literature and the breadth of their range I feel a Draft PS Factor Score of 2 might be applicable. However, my confidence in this estimate is weaker than I feel for the clapper rail's.

+Changed PT factor score from "4?" to "4"

+Changed PS factor score to 2

Based on our distance estimation work in Mississippi we found our greatest densities of least bitterns to be 1.644/ha (95% CI range: 1.32-2.06).

+Included quote about density into profile PS

I also feel that the threats facing breeding least bitterns in other portions of their range are also applicable to those along the Gulf Coast. Although I do not know of any references, and 'destruction of wetland habitat' is fairly encompassing should there be some mention that reducing tidal flows to marshes and thus allowing them to 'grow over' can also affect this species' densities?

+Included comment about tidal flow into profile TB

Ron Bazin

emailed to Katharine Parsons Thursday, September 08, 2005

Ron.Bazin@EC.GC.CA

Attached is the LEBI assessment you sent to me with my additions for Canada. They are based essentially on two publications made on the status of the LEBI in Canada for the Committee on the Status of Endangered Wildlife in Canada.

Overall I would have to agree with the factor scores given for each of the factors, including the TB factor score, even though the definition is not quite correct (score=4...."significant potential threats exist, but have not actually occurred"....but indeed wetland drainage and degradation being the biggest threat is occurring, albeit possibly more slowly for the larger wetlands where LEBIs are typically found).

The information that I provide for Canada doesn't probably help much in trying to determine the PS factor score, as the Canadian population is very small relative to the US. I'm not sure what should go there.

Finally, even without the PS factor score, it would appear that the LEBI would fall within either the Species of High Concern or the Species of Moderate Concern categories. I would suggest the former (Species of High Concern) given its national listing in Canada as threatened and its listing from endangered to special concern in a large number of US States where it nests.

The following comments by reviewer highlighted in grey:

Population Trend (PT):

"populations apparently stable during the period 1966-1989 (BBS) but birds observed on just 62 routes...data too few to assess populations (species poorly suited to census by roadside counts)...birdwatchers reported species reduced over much of range and extirpated in some areas..." (Gibbs et al. 1992)

"The clear perception among many field observers is that the Least Bittern is still declining" (in Canada), "most obviously in some Great Lakes Marshes in Ontario where most of the Canadian population breeds" (James 1999)

+Added quote regarding decline to PT

"no known recent change in breeding range...some evidence of increases in northeastern part of its range...weak indications of decreases in wintering populations..." (Kushlan and Hafner 2000)

Population Size (PS):

"nesting density estimates: 0.4 calling males/ha (WI), 0.5 calling males/ha (NY), 1 bird/ha (CO), 3 nests/ha (SC), 12 nests/ha (SC), birds/km from airboats (FL)—0.04 (open grassland), 0.13 (canals), 0.37 (airboat trails)..." (Gibbs et al. 1992)

"Although no accurate population figures are available, the Ontario breeding population may be in the order of 1000 pairs. The other provinces combined probably support fewer than 100 pairs" (Sandilands and Campbell 1987)....."Since that time, there still are not any definite data that would give a clear idea of population size and trend" (James 1999)

+Added population information to PS

Threats to Breeding Populations (TB):

degrade habitats..." (Gibbs et al. 1992)

"Destruction of wetland habitat....has been a major factor in loss of habitat in Canada" (James 1999)

+Added habitat destruction to TB

"in North America, preservation of wetlands >10 ha appears to be its most urgent conservation need..." (Kushlan and Hafner)

Add these References:

James, Ross D. 1999. COSEWIC Status report on Least Bittern, *Ixobrychus exilis*. Committee on the Status of Endangered Wildlife in Canada. 8 + iii pp.

Sandilands, A.P. and C.A. Campbell. 1987. Status report on the Least Bittern, *Ixobrychus exilis*. COSEWIC, Ottawa.

+Added references to profile

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

Least Bittern: a recent (2005) study from Squaw Creek NWR found that mean home range size for both sexes combined was 90.8 ha +/- 23.6 (Range = 14.2 to 462.7 ha, N = 18) and mean core range for both sexes combined was 18.2 ha +/- 7.2 (Range = 2.02 to 135.2 ha, N=18)(Amanda Griffin et al., Spatial Ecology of Breeding Least Bitterns on Squaw Creek National Wildlife Refuge, unpublished mss.).

+Added info to PS

RALLIDAE

Yellow Rail

Jennifer Wheeler

e-mail to Kathy Parsons 9/15/2005

Jennifer_A_Wheeler@fws.gov

Information from Jim Mattsson:

+Added estimated breeding pair range for North America to profile PS—"Range of estimated breeding pairs in North America is estimated between 5,160 to 13,450 with a median of 9,255 (Mattsson 2001, unpublished)."

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert.Russell@fws.gov

Yellow Rail: recent California records indicate species may still breed in far N and NE so delete extirpation report. Intensive surveys in Oregon have established that this species is a fairly widespread breeding species in SC portion of state where found at 27 sites in Wood River Valley and Klamath Marsh NWR (Birds of Oregon, 2003). Source of breeding note on this species from Louisiana is unknown. The 5th edition of the AOU checklist is unclear on this possibility and the species is not noted a breeding species in George Lowery's Louisiana Birds, Third edition. Double check this, it might be in an earlier edition of the AOU or Lowery.

+Added population information to PT

Ron Bazin

emailed to Katharine Parsons November 14, 2005

Ron.Bazin@EC.GC.CA

Population Trend

There is no reason to believe that the species is increasing anywhere in the global range. There is ample evidence showing that the species' habitat has declined and is still declining throughout the southern range. In the remaining portion of its range, the Hudson/James Bay region, it may also be declining in certain areas (Alvo and Robert 1999).

The species is no longer present in certain areas along the Hudson Bay coastline (La Pérouse Bay area) where it was regularly observed 30 years ago (K. Abraham-OMNR, pers. comm.), presumably because of habitat degradation due to Snow Goose overgrazing.

BBS trend not reliable for this species.

+Added above information to profile.

Population Size

Alvo and Robert (1999) estimated the global north American population to be around 5,000-6,000 pairs: a few thousand pairs in the Hudson/James bay coastal regions, 2,000 pairs in continental Canada and 600-750 pairs in the U.S. The total North American population would be around 10,000-12,000 individuals.

+Added above information to profile.

Threats to Breeding Populations

Wetland loss by agriculture and human development.

Habitat degradation in coastal Hudson/James bay region because of overgrazing by the enormous Snow Goose population (D. Hussell and K. Ross, pers. comm. in Alvo and Robert 1999).

Overgrazing in Hudson/James bay coastal marshes occurs mainly during spring migration where geese feed annually on emergent vegetation causing important habitat changes (K. Abraham, pers. comm.; Abraham et al. 2005; Jefferies et al. 2006).

Oil and gas development in Alberta

Human disturbance caused by birders (Alvo and Robert 1999).

+Added above information to profile.

Threats to Non-breeding Populations

Habitat loss for wintering Yellow Rails has been so extensive in the U.S. that the wintering range may no longer be contiguous (T. Bookout, pers. comm. in Alvo and Robert 1999).

Rice harvesting may cause Yellow Rail casualties (Cardiff and Smalley 1989 in Alvo and Robert 1999)

+Added above information to profile.

Breeding Distribution

Range extension in the northwest portion of its range: Yellow Rails have been recently recorded in the Northwest territories in the Nahanni National Park Reserve of Canada near the Yukon border (Craig Machtans, CWS-PN; pers. comm.)

+Added above information to profile.

Area extent of the breeding distribution would be 3 800 000 km² (calculated with GIS using the map in the status assessment sheet, and area coverage in Alvo and Robert 1999)

*+This value, although different from that calculated without GIS, would not alter the factor score. The distributional data for all 43 spp of marshbirds were developed using a single process with scale-adjusted range maps. Since the object of this exercise is to identify broad-scale differences in **relative** distribution, it's preferable that all species be treated similarly, rather than adopting different data for some species. During the next round of species assessments to take place within the next year or so, we anticipate using GIS software on digitized range data for all species.*

Non-breeding Distribution

Area extent of the non-breeding distribution would be 277,800 km² (calculated with GIS using the map in the status assessment sheet, and area coverage in Alvo and Robert 1999)

This quick ND area analysis further supports the comment that the BD and ND areas need to be recalculated and the methods of analysis outlined. For example, even if ND includes some of the BD, for many of the species that breed in Canada at least (Canadian portion of breeding range), there cannot be a significant or complete overlap of the BD and ND because many (most) areas in Canada are completely frozen in the winter precluding any ND in Canada.

+Please note that non-breeding is not equivalent to "wintering" range. Non-breeding includes all areas where non-breeding birds are found and generally corresponds to the species' entire range of occurrence since migrating, "wintering" and/or subadult birds are generally found throughout the species' range.

Citations:

Abraham, K. F., R. L. Jefferies, and R. F. Rockwell. 2005. Goose-induced changes in vegetation and land cover between 1976 and 1997 in an Arctic coastal marsh. Arctic, Antarctic and Alpine Research 37(3):269-275.

Alvo, R. and M. Robert. 1999. COSEWIC status report on the Yellow Rail (*Coturnicops noveboracensis*) in Canada. Committee on the Status of Endangered Wildlife in Canada. Environment Canada, Ottawa, Ontario.

Cardiff, S.W. and G.B. Smalley. 1989. Birds in the rice country of southwest Louisiana. Birding 21: 232-240.

Jefferies, R. L., A. P. Jano and K. F. Abraham. 2006. A Biotic Agent Promotes Large-Scale Catastrophic Change in Coastal Marshes of Hudson Bay. J. Ecology. Accepted September 27, 2005.

+Added above information to profile.

Ruddy Crane

White-throated Crane

Gray-breasted Crane

Jennifer Wheeler – noted that Gray-breasted Crane shown as having a North American distribution in the final table; however this species occurs in South America as well, thus has a Western Hemisphere distribution. Corrected in table.

Black Rail

Mike Legare

emailed Katharine Parsons Tuesday, September 27, 2005

Mike_Legare@fws.gov

I've read over the Black Rail review and agree with all the factor scores.

I would add that fire ant predation may be a threat to breeding (Legare and Eddleman 2001), and that large scale marsh burning may locally impact the non-breeding populations (Legare et al 1998).

+Added comments to TN and TB

Legare, M. L., H. Hill, R. Farinetti, F. T. Cole. 1998. Marsh bird response during two prescribed fires at the St. Johns National Wildlife Refuge, Brevard County, Florida. Abstract. T. L. Pruden and L. A. Brennan, eds. 20th Proceedings of the Tall Timbers Fire Ecology Conference: Fire in Ecosystem Management.

Legare, M. L. and W. R. Eddleman. 2001. Home range size, nest-site selection, and nesting success of Black Rails in Florida. Journal of Field Ornithology 72(1) 170-177.

+Added two references to profile

Robert Russell

emailed Jennifer_A_Wheeler Tuesday, September 27, 2005

Robert_Russell@fws.gov

Black Rail writeup looks good. There are hints of a Tennessee and VA mountain population in the literature but probably not worth mapping until we know more about this group.

Osvel Hinojosa-Huerta

emailed Jennifer_A_Wheeler Wed 9/28/2005

osvel@email.arizona.edu

Here are my comments about other marshbirds. It is not much, basically some extra information on the breeding distribution and estimated abundance in Baja California and Sonora, but nothing to modify the scores.

Black Rail – coturniculus

I would like to add some information of the status of the subspecies in Baja California and Sonora. Breeding Distribution – The subspecies breeds in the Colorado River delta (Ciénega de Santa Clara and El Doctor wetlands in the state of Sonora, and Andrade Mesa Wetlands in Baja California), with an estimated population of 50-75 pairs. We don't know the trend of the populations in the Colorado delta, as the subspecies was first detected in this region in 1998.

+Added subspecies information to PS

In the Pacific Coast of Baja California, there are remnant populations in San Quintín and San Telmo, with no population estimates, but very few records. I think that the subspecies is very rare now in this region. Ornithological expeditions to the region in the early 1900's mentioned that Black Rails were common in these wetlands (Nelson 1921, Bent 1926, Huey 1926, 1928, Grinnell 1928), thus suggesting a drastic decline of the population.

+Added subspecies information to PT

Bent, A.C. 1926. Life histories of North American marsh birds, orders Odontoglossae, Herodiones, and Paludicolae. U.S. Natural Museum, Bulletin 135.

Grinnell, J. 1928. A distributional summation of the ornithology of Lower California. University of California Publications in Zoology 32:1-30.

Hinojosa-Huerta, O., W. Shaw, y S. DeStefano. 2002. Detections of California Black Rails in the Colorado River delta, Mexico. Western Birds.

Huey, L.M. 1926. Notes from northwestern Lower California, with the description of an apparently new race of the screech owl. Auk 63: 347-362.

+Added references to profile

Buff-banded Rail

Guam Rail

Susan M Haig

emailed to Katharine Parsons Wednesday, August 17, 2005

susan_haig@usgs.gov

the GR account looks fine.

Here are some more refs if you would like them:

Haig, S.M., J.D. Ballou, and S.R. Derrickson. 1990. Management options for preserving genetic

diversity: reintroduction of the Guam Rail to the wild. *Conservation Biology* 4: 290-300; 464.

Haig, S.M., and J.D. Ballou. 1995. Genetic diversity among two avian species formerly endemic to Guam. *Auk* 112: 445-455.

Haig, S.M., J.D. Ballou, and N.J. Casna. 1994. Identification of kin structure among Guam Rail founders: a comparison of pedigrees and DNA profiles. *Molecular Ecology* 3: 109-119.

+ Added these references

Clapper Rail

Osvel Hinojosa-Huerta

e-mail to Jennifer_A_Wheeler 09/20/2005

osvel@email.arizona.edu

The population size of *yumanensis* is estimated at about 4,800 individuals in the Colorado River delta in Mexico, for 2004, but it has fluctuated between 3,900 and 6,600 between 1999 and 2004. A reference for the estimates of abundance (1999 and 2000) is:

+Added information to PS

Hinojosa-Huerta, O., S. DeStefano, and W. Shaw. 2001. Abundance and distribution of the Yuma Clapper Rail (*Rallus longirostris yumanensis*) in the Colorado River delta, Mexico. *Journal of Arid Environments* 49:171-182.

+Added reference

We have continued the same procedures for monitoring the subspecies in the Colorado River delta since then.

In the distribution map, *yumanensis* is indicated as going continuously from the lower Colorado River down to the state of Jalisco in southwestern Mexico. However, there is a space of about 450 km along the northern coast of Sonora where there are no Clapper Rails, from the end of the southern marshes of the Colorado River delta, down to the beginning of the mangrove marshes in Bahia Kino (central Sonora).

Along those lines, I think that the status of subspecies in NW Mexico is still not clear, especially regarding *yumanensis*. Some authors have suggested that *yumanensis* is restricted to the Lower Colorado River and delta, using freshwater and brackish marshes; and that subspecies from southern Sonora and northern Sinaloa, using mangrove wetlands, correspond to the subspecies *rhizophorae*, while another subspecies occurring in the more tropical coastal wetlands of southern Sinaloa, Nayarit, and Jalisco (*nayaritensis*).

There has not been adequate taxonomic work to support this classification, but I think that *yumanensis* is restricted to the Lower Colorado River and delta, considering the habitat use differences, and the distribution space between regions.

Jay Roberson

email to Jennifer_A_Wheeler 09/13/2005

Jay.Roberson@tpwd.state.tx.us

All text and scores appear appropriate to me except as follows.

First, generally throughout, I believe a threat that's uniformly missing for Rallidae is reliable surveys. If we have insufficient information on which to determine population trend, how can we accurately estimate and compare conservation concern?

+Included threat information into profile

Clapper Rail:

Population size: I suggest a score of "2" because, as I understand it, this score is assessed on the accumulative totals of all 17 subspecies. The sum of the lowest estimated number of each subspecies identified falls within this range.

+Only 3 subspecies have totals

Threats to breeding: I could not find the statement or quote by Taylor (1998) that "...rails are also hunted extensively in east and gulf coastal states...".

+Quote appears in Taylor(1998) on page 275, first paragraph

If 'extensively' is to be interpreted as quantity or intensity then this is incorrect and would seem to contradict Conway and Eddleman's (1994:174) observation of "...a long-term, steady decline in interest in hunting rails...". If it refers to geographic extent, then it may be true depending upon your perspective. If 'extent' means the proportion of their current occupied range that is hunted, then it is true that 13 states along the Atlantic seaboard and Gulf Coast have hunted rails. However, hunter interest and harvest appear to be low and declining relative to population size (see preliminary HIP estimates from Harvest Surveys section of the Division of Migratory Bird Management, USFWS). In Texas hunter effort has been declining faster based upon our state harvest survey than BBS trends. Also, a score of 5 seem inappropriate as it is defined as "Known threats can be documented." If you mean by this that experts have found some evidence of the various factors affecting selected individuals or subspecies, then I would agree. However, if you mean that we have empirically documented the various effects of wetland habitat loss and hunting on breeding populations numbers or density, I would not agree. Therefore, I would recommend a score of "4" or redefining what the score of "5" means.

+Changed TB to "4?"; harvest comment added to TB

Non-breeding distribution: Why do the ranking limits of the Assessment Factor scores for non-breeding distribution differ from breeding distribution? For example, a score of 5 - "highly restricted" for non-breeding distribution has a different limit ("up to 1,300,000 km²") from a score of 4 ("up to 450,000 km²") for breeding distribution. Why wouldn't they be the same, especially because breeding habitat requirements of waterbirds would intuitively seem to be most constraining? Wetlands seem to be lowest and declining number, size and quality of all terrestrial habitat types. Therefore, I would recommend a score of 4 instead of 5.

+Changed TN to 4

+Explanation: the Assessment Protocol explains how the ND ranges were determined

Scott Rush

emailed to Katharine Parsons Monday, August 29, 2005

rushs@owl.forestry.uga.edu

One item that I noticed was that you do not have breeding density estimates for these species at locations within the Gulf States. As a product of our work last summer I have these estimates for several locations within Mississippi. Although this data has not been published would these estimates be helpful for the status assessments?

+ Response sent: We included density information when we ran across it in the compiled literature sources in case species experts could use it to estimate population size. It would be great to add your information in even though not yet published. I think in most cases it will be difficult to estimate population size using density information since we also need area estimates of suitable habitat. But it might be a way to place subspecies in a range of population sizes. If you have any sense whether LEBI or CLRA deserve a 1-5 factor score for population size, it would be great to get your opinion!

Scott Rush

emailed to Katharine Parsons Monday, September 12, 2005

rushs@owl.forestry.uga.edu

Starting with the clapper rail assessment:

First page, under Population Trend, after the subspecies accounts in the quote from Conway and Eddleman you have 'during the past 100 yrs ...on basis on limited' I believe that this is a typo and should read 'during the past 100 yrs ...on basis of limited'.

+Changed "on" to "of" in profile

Page 3, under Non-breeding Dist. 'R. longirostris waynei – Coaslt' should be 'Coastal'

+Corrected typo in profile

Although I do not have much field experience with clapper rails outside of the Gulf Coast, based on the literature my feeling is that a Draft PS Factor Score of 3 might be applicable.

Based on our distance estimation work in Mississippi we found our greatest densities of clapper rails to be 9.95/ha with a 95% CI range: 7.73-12.83.

+included density information in PS in profile

I am always amazed at how little is known about the basic life history and population attributes this species along the Gulf Coast of the United States. While there is not a great breadth of literature to draw citations from for the assessment it does seem likely that the Threats to Breeding experienced elsewhere also afflict populations along the Gulf Coast.

Helen Hands

emailed to Jennifer_A_Wheeler 09/19/2005

helenh@wp.state.ks.us

Add References:

Eddleman, W. R., and C. J. Conway. 1994. Clapper rail. In T. C. Tacha and C. E. Braun, eds. Migratory shore and upland game bird management in North America. Allen Press, Lawrence, Kansas.
+Added reference to profile

Jim Hansen

emailed Jennifer Wheeler 09/27/2005

jihansen@mt.gov

I won't comment on the factor scores, but I will offer some ideas that could possibly affect them.

Hunting. As a general comment on several of the species accounts, there is more weight given to the effects of hunting on populations than I think is accurate or appropriate. We're told, for example, that "over hunting" is one of the threats to breeding populations of American coots. I understand that this was found in a species account in the literature, but that doesn't make it true that it's high enough on the list of threats to be worth mentioning.

Other such statements in the accounts include the following:

Clapper rail - Under "threats to breeding," it's stated that the species is "hunted extensively in east and gulf coastal state."

+ See J. Roberson (Sandhill Crane section)

Eduardo Palacios Castro

emailed Katharine Parsons Wednesday, October 05, 2005

epalacio@cicese.mx

I read with much interest the draft status assessment of the CLRA, especially the parts for the subspecies *levipes* and *beldingi*. These are my comments:

Population Trend: *levipes* definitely is declining, even in Mexico where it was thought that they were stable because not habitat destruction has occurred in comparison to wetland loss in southern California. However, estimates of 500 individuals in the salt marshes of Bahia San Quintin (the largest wetland for this subspecies in Baja California) in 1986 have declined to less than 100 individuals in 2002-2004. For *beldingi*, Bancroft (1927) reported this species in Scammon's lagoon as very common but now is very rare. The maximum count in this wetland was less than 20 rails. One likely reason for the decline in this wetland is saltpan construction (more than 20,000 ha of saltmarsh were converted into saltworks in the 1950s), another could be predation by coyotes that are very abundant in the Vizcaino wetlands (including Lagunas Manuela, Guerrero Negro, Ojo de Liebre, L Bocana, El Coyote, and San Ignacio). Another hypothesis for this decline is that predation is a limiting factor because there are no roosting sites during high tides, so they are predated by coyotes when the rails are pushed to the margins of the wetland when spring tides. In the wetlands with mangrove (Lagunas Ojo de Liebre, Guerreron Negro and Manuela have no mangrove only saltmarsh) in Baja California Sur, Clapper Rails are more abundant, during high tides they roost on the mangrove trees and are inaccessible to ground predators like coyotes. In summary, I agree with PT Factor Score= 4.

Population Size: *levipes*, I do not know how many rails remain in southern California because there is a recovery project that involve breeding in captivity and release of young rails in different wetlands. They have released hundreds but I do not know the survival or success of this project. Based on our data from Baja California (230 individuals total) and the population in southern California, a PS Factor Score of 4 is correct, at least for this subspecies. For *beldingi*, an educated guess of the population size is 500 individuals, no more, but it would be also a PS Factor Score of 4. I understand that you need to consider the other subspecies.

Threats to Breeding: *levipes* Bahia San Quintín is largely intact, although threatened by resort developments planned by international companies. Agriculture encroachment into upper saltmarsh wetlands is actually occurring in the wetlands of Baja California. Pesticides used in the adjacent agricultural habitat also poses a hazard to the avifauna and its food source, but the effects are not documented. Livestock grazing (goats and cows) is a recent threat to the salt marsh habitat of Bahia San Quintín. Excessive grazing leads to loss of emergent cover, trampling, and disturbance of nesting pairs, and can have profound negative effects on ground nesting birds such as rails. Human disturbance is also a current threat to the conservation of natural areas and resources of this wetland. Because Bahia San Quintín is close to the major population centers of southern California, is accessible to tourists with different interests (recreational hunting, sport fishing, camping, boating, diving, etc.) and the pressure to natural areas and resources is year round. This wetland lacks of a management plan and there is no regulations to protect the ecological integrity of those priority habitats that are being affected by human activities. For the wetlands of Baja California Sur (with *beldingi*) the main threats are marinas and shrimp aquaculture which involve dredging and interference with tidal flow and habitat degradation. In summary, a TB Factor Score of 5 is good for both subspecies habitat. This is the same for Threats to Non-breeding, since they are residents year-round.

I have no comments to the other BD and ND Factor Scores
+Incorporated the above information in CLRA profile

Troy Corman
 emailed to Jennifer Wheeler 10/13/05

I appreciate the opportunity to review the draft species status assessment for the solitary breeding waterbirds. Overall, I feel everyone has done a wonderful job in compiling and summarizing this information. Unfortunately, I will not be able to make the Waterbird Society meeting, but would like to provide a few comments and suggestions:

For accuracy purposes, I suggested including fresh water marsh as Clapper Rail habitat since this is where the Endangered Yuma race breeds and winters in the SW U.S.

Thank you again for this opportunity and please contact me if you have any questions in regards to this information.

+Added information used to help designate breakout groups at marshbird workshop

Helen Hands
 emailed to Jennifer_A_Wheeler 10/18/2005
helenh@wp.state.ks.us

1. Is PT of 4 for all subspecies or for the endangered subspecies? As for the SACR, there may be wide variability in PT among the various subspecies. Thus, a different PT should be estimated for each subspecies for these Assessments to be meaningful.

+Marshbird Workshop agreed to PT=3; additional information was included in categorization recognizing variable status of CLRA subspecies

2. Are numbers under PS with a "t" in thousands? If so, then adding the numbers for each of the 3 subspecies with population estimates would generate a population of about 3.5 million, well within the criteria for PS to equal 1. And that's just for 3 subspecies. **Change PS to 1.**

+Marshbird Workshop agreed to PS=2;" t" included after population numbers indicates total individuals (as opposed to breeding individuals). Added text to clarify this.

3. Under threats to breeding, there is a quote that "...rails are also hunted extensively in east and gulf coastal states..." U.S. CLRA harvest in 2003 and 2004 was estimated to be 6,300 and 9,200, respectively. This was about 18% of the rail harvest. None were harvested in Louisiana, Mississippi, or Alabama. About 20,000 rail hunters in 2004, so very few compared to the hundreds of thousands of duck hunters. Probably fewer than 4,000 people hunted CLRA (20,000 times 0.18) because not all rail hunters had access to CLRA. Hardly intensive. Only 12 states in the AF, 3 states in the MF, and 1 in the CF hunt CLRA, so hardly extensive. I'm glad you changed the TB from 5 to 4.

+Added above information to profile to clarify hunting impact

4. **This species should definitely not have the same level of concern as the whooping crane.** I suggest its conservation category be changed to low or moderate, at least for the non-endangered subspecies.

+Marshbird Workshop agreed to category of Moderate Concern

King Rail

Jay Roberson

email to Jennifer_A_Wheeler 09/13/2005

Jay.Roberson@tpwd.state.tx.us

All text and scores appear appropriate to me except as follows.

First, generally throughout, I believe a threat that's uniformly missing for Rallidae is reliable surveys.

If we have insufficient information on which to determine population trend, how can we accurately estimate and compare conservation concern?

+included comment about threat into profile TB

King Rail:

Population size: Suggest a score of 3.

+ Changed draft score from "?" to "3?"; this requires discussion

Christopher Rustay

emailed to Jennifer_A_Wheeler; Katharine Parsons Thursday, August 25, 2005

christopher.rustay@pljv.org

KIRA -

1) Reference the dates that the density data were published in PS. The quoted densities are all from the early 1960's from which we are supposedly not taking data? Additionally, the first two studies were apparently male detections only.

+ Comments regarding KIRA: the density information is included in the event experts feel comfortable using it to estimate population size. In keeping with your thoughts on completeness of information, it may be preferable to show old information if that is all that's available. However, we completely agree that the information should be dated and will amend the profile accordingly.

+ Reported 1961 to 1964 as range of dates density data was obtained as per Meanly 1992; modified profile as suggested

Helen Hands

emailed to Jennifer_A_Wheeler 09/19/2005

helenh@wp.state.ks.us

...where muskrats are trapped, rails often become casualties (Comment: Muskrat trapping probably doesn't occur during the breeding season, so this wouldn't be a threat to breeding)

+Moved this threat to TN

Breeding Distribution (BD)

R. elegans elegans—E Canada & NE USA (Delany and Scott 2002) (Comment: Delete N in NE; Map above not labeled, but similar map in Reid et al. 1994 shows that *R. elegans elegans* breeds in eastern U.S., except New England, Appalachians, and extreme northern Midwest.)

+Breeds in NE USA if you consider the area included when nation is split into quadrants

Non-breeding Distribution (ND)

2,088,400 km² (plan area distribution; estimated from range maps) (Comment: Based on map above it seems that the non-breeding range is smaller than the breeding range, if so, the ND Factor Score could be much lower, maybe a 5.)

+See Assessment process for BD and ND

Add this Reference:

F. A. Reid, B. Meanley, and L. H. Fredrickson. 1994. King rail. In T. C. Tacha and C. E. Braun, eds. Migratory shore and upland game bird management in North America. Allen Press, Lawrence, Kansas.

+Added this reference to profile

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

King Rail: Threats to Breeding Populations: loss of wet prairie habitat fringing water bodies in the Midwest is a major historical reason for KIRA decline; management of waterfowl impoundments in Mississippi Valley with programmed drawdowns in mid-to late spring to promote vegetation growth may create habitat sinks for breeding KIRAs.

+Added threat to TB

Helen Hands

emailed to Jennifer_A_Wheeler 10/18/2005

helenh@wp.state.ks.us

1. How often are KIRA caught in furbearer traps? Source? Trapping is a declining activity so this could be a past threat.

+Added above information to profile

2. BD – change NE US to E US to correspond with the range map.

+Breeds in NE USA if you consider the area included when nation is split into quadrants

3. KIRA comprise maybe 1-2% of the total rail harvest.

+Added above information to profile

Ron Bazin

emailed to Katharine Parsons November 14, 2005

Ron.Bazin@EC.GC.CA

King Rail in Canada

Conservation Concern Status Assessment– Canada=Highly Imperiled (PT=5, PS=5, TB=5)

Population Trend: PT=5

Given the vast size of the Great Lakes wetlands in presettlement times, King Rails may have been more abundant and widespread than they are today. Historical records from Ohio, as reported by Trautman (1940), suggest that the King Rail was the most abundant breeding rail in some Lake Erie marshes as recently as the 1930s, with up to 50 pairs reported at individual sites.

The demise of the King Rail in the northern and midwestern parts of its range began in the 1930s and accelerated after 1940, concurrent with widespread habitat loss and degradation (Peterjohn 1989). Today, King Rails are absent or scarce even in areas with apparently suitable habitat (e.g., western Lake Erie in Ohio [Meanley 1969; Peterjohn and Rice 1991]). This suggests that other factors besides habitat considerations (e.g., population size below a critical threshold, loss of wintering and/or migration habitat, stochastic events on the breeding grounds, mortality between breeding seasons) may affect King Rail populations.

Occurs and breeds in southern Ontario primarily Lake St.Clair and Lake Erie coastal freshwater marshes.

Breeding Bird Survey and Ontario Marsh Monitoring Program have low detection rates for King Rail.

Committee on the Status of Wildlife in Canada (COSEWIC) reported major declines throughout Canadian range (James 2000).

King Rail *Rallus elegans* is listed as Endangered by COSEWIC in 2000, protected under National *Species at Risk Act*. This designation was prompted by concerns over the species' small population size, continued loss of habitat, and threats to remaining habitat. Comparisons of Ontario

Breeding Bird Atlas 1980-1985 & 2000-2005 preliminary results suggest possible range expansion for King Rail.

Population Size: PS=5

Update COSEWIC Status Report on King Rail (James 2000)

As result of extensive King Rail 1997 surveys population estimate in Canada 25-50 pairs (National King Rail Recovery Team 1997)

Threats to Breeding Populations: TB=5

- Habitat loss/degradation
- Human disturbance
- Invasive plants
- Contaminants
- Natural factors
- Lack of breeding information, population status, threats, conservation measures, inaccessible habitat

King Rails are secretive birds occupying difficult-to-access habitat and are consequently one of the least studied species. Little is known of their population size and distribution, breeding ecology, or specific habitat needs.

This lack of information is a significant threat to breeding population in Canada.

Significant loss, fragmentation and degradation of coastal and inland wetlands. Majority of large coastal and inland wetlands that remain are managed to maintain water levels. Water depths in managed units are often too deep for King Rails and other wetland bird species. Studies from Missouri suggest that King Rails avoid water depths >44 cm and strongly prefer water depths <25 cm (Reid 1989). Many impoundments lack fluctuating seasonal water regimes that increase the extent and diversity of wetland plant communities and improve habitat quality for King Rails and other wetland fauna (Keddy 1990). Coastal wetlands are dependent on both seasonal and long-term water level changes to maintain their productivity, diversity, and resilience. Extremely high or low levels can have some adverse short term effects on wetlands; however, these conditions are required over the long term to periodically renew the plant and wildlife communities within them (International Joint Commission 1989). Shoreline structures and dikes often isolate coastal wetlands and prevent them from expanding landward when water levels are high. King Rails are more dependent on dry-damp areas than are other rallids and so may be particularly vulnerable to the loss of adjacent wet meadows and upland habitat.

Threats to Non-breeding Populations: TN=IL

Information lacking

Non-breeding population – migratory routes/wintering locations unknown

Breeding Distribution: BD=IL

% of North American breeding range in Canada undetermined, estimate <5% Canada - Currently, in Ontario, breeding occurs in several coastal wetlands along Lake Erie, Lake St. Clair, and Lake Ontario and in interior marshlands around the Bruce Peninsula, Lake Simcoe, and Ottawa (McCracken and Sutherland 1987).

Non-breeding Distribution: ND=IL

Non-breeding population restricted due to habitat quality and availability

Aerial extent of habitat unknown

Conservation Concern Status Assessment– Canada=Highly Imperiled

Literature Cited:

Canadian Wildlife Service, Environment Canada 1997 King Rail Survey
National King Rail Recovery Team

International Joint Commission. 1989. Living with the lakes: challenges and opportunities. Annex B. Environmental features, processes, and impacts: an ecosystem perspective on the Great Lakes-St.

Lawrence River system. Functional Group 2, International Joint Commission, Water Levels Reference Study.

James, R.D. 2000. Update COSEWIC Status Report on King Rail, *Rallus elegans*, Râle élégant in Canada. Committee on the Status of Endangered Wildlife in Canada. 8 pp.

Keddy, P.A. 1990. Water level fluctuations and wetland conservation. Pages 79-91 in J. Kusler, and R. Smardon (eds.), Proceedings: International Symposium on Wetlands of the Great Lakes. Association of State Wetland Managers, Niagara Falls, New York.

McCracken, J.D. and D.A. Sutherland. 1987. King Rail. Page 148 in M.D. Cadman, P.F.J. Eagles, and F.M. Helleiner (eds.), Atlas of the breeding birds of Ontario. University of Waterloo Press, Waterloo, Ont.

Meanley, B. 1969. Natural History of the King Rail. U.S. Department of the Interior, Bureau of Sport Fisheries and Wildlife: North American Fauna No. 67, Washington, D.C.

Peterjohn, B.G. 1989. The birds of Ohio. Indiana University Press, Bloomington, Ind.

National King Rail Recovery Team 1997 Canadian Wildlife Service, Environment Canada unpublished.

Peterjohn, B.G. and D.L. Rice. 1991. The Ohio breeding bird atlas. The Ohio Department of Natural Resources, Columbus, Ohio.

Reid, F.A. 1989. Differential habitat use by waterbirds in a managed wetland complex. Ph.D. dissertation. University of Missouri, Columbia, Missouri.

Trautman, M.B. 1940. The birds of Buckeye Lake, Ohio. Museum of Zoology Miscellaneous Publication No. 44. University of Michigan, Ann Arbor, Mich.

http://www.speciesatrisk.gc.ca/search/speciesDetails_e.cfm?SpeciesID=24

Virginia Rail

Jay Roberson

email to Jennifer_A_Wheeler 09/13/2005

Jay.Roberson@tpwd.state.tx.us

All text and scores appear appropriate to me except as follows.

+Changed PT factor score from "3?" to 3

Virginia Rail:

Threats to non-breeding populations: I suggest you consider placing habitat threats during non-breeding season as the major threat to long-term viability of populations. "Habitat loss, primarily draining of inland freshwater wetlands for agricultural purposes, is the greatest threat to Virginia rail populations" (Conway and Eddleman 1994:202). Further, they state, "Habitat management programs should favor acquisition and restoration of natural wetlands areas that have been degraded...". This is not just true of breeding habitat but of non-breeding (wintering a migrational) habitats as well. I agree with a TB score of 4.

+Added quote to the profile TN

Conway, C. J. and W. R. Eddleman. 1994. Virginia Rail. Pages 193-206 in T. C. Tacha and C. E. Braun, eds. Migratory Shore and Upland Game Bird Management in North America. International Association of Fish and Wildlife Agencies, Washington, D.C.

+Added reference to profile

Helen Hands

emailed to Jennifer_A_Wheeler 09/19/2005

helenh@wp.state.ks.us

"population declined 2.2% annually from 1982 to 1991, during a period when natural droughts also reduced the availability of wetlands; the total population is now considered relatively stable..." (Taylor 1998)

Comment: Significant increasing BBS trend for 1970-1994, but BBS is not good for any of these species

+Added comment to PT

Threats to Breeding Populations (TB)

...frequently hit by vehicles (especially young birds)...

Comment: How significant is this relative to predation?

Threats to Non-breeding Populations (TN)

"hunting pressure is highest on the birds' wintering grounds...frequently collides with utility wires and television towers while flying low at night on migration..." (Conway 1995)

Comment: Hunting pressure likely insignificant. Look at HIP Harvest Reports. Very few people hunt rails. Although the bag limits are high, most don't shoot a bag limit. Wetland loss is the major limiting factor.

+Added comment to TN

Add these References:

C. J. Conway. 1994. Virginia rail. In T. C. Tacha and C. E. Braun, eds. Migratory shore and upland game bird management in North America. Allen Press, Lawrence, Kansas.

+Added reference

Jim Hansen

emailed Jennifer Wheeler 09/27/2005

jihansen@mt.gov

I won't comment on the factor scores, but I will offer some ideas that could possibly affect them.

Hunting. As a general comment on several of the species accounts, there is more weight given to the effects of hunting on populations than I think is accurate or appropriate. We're told, for example, that "over hunting" is one of the threats to breeding populations of American coots. I understand that this was found in a species account in the literature, but that doesn't make it true that it's high enough on the list of threats to be worth mentioning.

Other such statements in the accounts include the following:

Virginia rail - "Hunting pressure is highest on the birds' wintering grounds," implying that this is a threat.

Other threats. I think that the major threat for all of the species is habitat loss and degradation.

You might consider deleting some of the minor threats that are mentioned because they are insignificant. One example is under Virginia rail, where it says they are "frequently hit by vehicles."

Osvel Hinojosa-Huerta

emailed Jennifer_A_Wheeler Wed 9/28/2005

osvel@email.arizona.edu

For the other species, I don't have much to add, I think that the scores are adequate. I will just add that Virginia Rails and American Bitterns breed in the Ciénega de Santa Clara in Sonora; Virginia Rails are abundant, with a few thousand individuals,...

+Added information to PS

Helen Hands

emailed to Jennifer_A_Wheeler 10/18/2005

helenh@wp.state.ks.us

1. TB – "frequently hit by vehicles." Is this really a significant cause of loss?

+threat appears in peer-reviewed literature although there is no quantification of effect that assists with interpretation of significance

It doesn't make sense for the TN score to be higher than the TB score when the non-breeding range is nearly twice as large as the breeding range...unless there is some evidence that non-breeding wetlands are more threatened than breeding wetlands.

+Marshbird Workshop agreed TB=4 and TN=4; threats risks are not estimated on basis of geographical extent of range but rather on the existence of occurring threats, potential threats or no threats

Ron Bazin

emailed to Katharine Parsons Thursday, November 14, 2005

Ron.Bazin@EC.GC.CA

Virginia Rail in Canada

Conservation Concern Status Assessment– Canada=Moderate Concern (PT=3,TB=4)

Population Trend: PT=3

Canada

BBS 1968-2004(Canada): 2.8 (-2.4- 8.4)N=80 routes

BBS 1994-2004 (Canada): -10.0 (-18.3 - - 0.9) N=49 routes

CBC: No data

Species population considered stable –

C. J. Conway, W. R. Eddleman, S. H. Anderson 1994. Nesting success and survival of Virginia Rails and Soras. Wilson Bull. 106: 466–473.

Population Size: PS=IL

BBS – low detection rates

Threats to Breeding Populations: TB=4

Habitat loss/degradation

Human disturbance

Invasive plants

Collisions/road kills

Contaminants

Natural factors

Lack of breeding information, population status, threats, conservation measures, inaccessible habitat

Wetland fragmentation and degradation reduced suitable breeding areas.

Use a range of wetland sizes >1ha.

Threats to Non-breeding Populations: TN=IL

Information lacking

Non-breeding population – migratory routes/wintering locations unknown

Breeding Distribution: BD=IL

Breeding distribution restricted by limited and continued loss of wetlands/marshes

Non-breeding Distribution: ND=IL

Non-breeding population restricted due to habitat quality and availability

Aerial extent of habitat unknown

Literature Cited:

Rufous-necked Wood-Rail

Gary Stiles

emailed to Jennifer Wheeler 10/18/05

fgstiles@unal.edu.co

Another secretive and easily overlooked species, probably commoner than is currently thought as it is secretive and largely crepuscular (nocturnal??) and its voice is less conspicuous and well known than its congener. It seems to be most characteristic of mangroves, though it has been recorded in other wet forest types. Cutting of mangroves for shrimp farms or charcoal seem to be the greatest threats.. I would consider it near-threatened in Central America, possibly even vulnerable although its abundance is really poorly documented.

+Added information to profile

Gray-necked Wood-Rail

Gary Stiles

emailed to Jennifer Wheeler 10/18/05

fgstiles@unal.edu.co

I cannot comment on the status of all the races, but in areas where I know it I would not consider it to be in any danger. Although best adapted to forest streams and swamps, it persists quite well in landscapes where forest (or dense second growth) is reduced to strips along streams in a matrix of pastures (or even urban park sites locally in Colombia!) All it seems to really need is shaded waterways. Its voice is loud and conspicuous, and gives a much better idea of its abundance than do the occasional sightings.

+Added information to profile

Uniform Crake

Gary Stiles

emailed to Jennifer Wheeler 10/18/05

fgstiles@unal.edu.co

This species is secretive and easily overlooked, especially as it does not call frequently over most of the year. Its preference for lowland wet forest, especially streamsides and swampy areas, is motive for concern given the widespread deforestation over much of its N range, but it will use dense wet second growth (Heliconia thickets, etc. beside forest. At most I would consider it near-threatened in Central America.

+Added information to profile

Sora

Jay Roberson

email to Jennifer_A_Wheeler 09/13/2005

Jay.Roberson@tpwd.state.tx.us

All text and scores appear appropriate to me except as follows.

First, generally throughout, I believe a threat that's uniformly missing for Rallidae is reliable surveys. If we have insufficient information on which to determine population trend, how can we accurately estimate and compare conservation concern?

+Changed PT factor score from "4?" to "4"

Sora:

Population size: Suggest a score of 1.

+Need numbers from reviewer

Threats to breeding populations: First, legal sport hunting does not occur during the breeding season.

+Does breeding occur south of the US? YES

The Conservation Status Assessment document defines 'threats to non-breeding populations' as "...threats known to exist for each species during their non-breeding season." Second, there is no empirical evidence suggesting hunting depresses subsequent spring's breeding populations. This is conjecture. Melvin and Gibbs (1996:13) indicate that the "[E]ffects of annual harvest on Sora populations are unknown" and they admit that "...low hunter interest and difficulty of hunting rails probably keeps annual kill within sustainable levels...".

+Added quote by Melvin and Gibbs to TN

If other studies exist, please cite them here. Third, even if there were 100,000 Soras taken legally by hunters per year (which I don't think current HIP survey data will support), this is less than 10% of a population that probably exceeds 1M given cited average density and minimum occupied non-breeding

range. Melvin and Gibbs (1994, 1996) do not state in any of their conservation, management or recommendations sections that legal sport hunting regulations should be reduced. Fourth, 'habitat loss' and fragmentation far exceed the effects of hunting as a threat. Why? It is much more likely that the last Sora-inhabited freshwater emergent wetland will be drained before hunters will kill the last male and female Soras (given their secretive nature and the difficulty of hunting the habitat in which they exist). If you keep 'hunting' in the narrative as a threat, then I suggest inverting the threats and placing habitat first. I generally agree with a score of 4 for 'threats' for breeding and non-breeding populations.

+Changed TB factor score from "4?" to 4

+Changed TN factor score from "4?" to 4

Melvin, S. M. and J. P. Gibbs. 1994. Sora. Pages 209-217 in T. C. Tacha and C. E. Braun, eds. Migratory Shore and Upland Game Bird Management in North America. International Association of Fish and Wildlife Agencies, Washington, D.C.

+Added this reference

Helen Hands

emailed to Jennifer_A_Wheeler 09/19/2005

helenh@wp.state.ks.us

Population Size (PS)

DRAFT PS FACTOR SCORE=?

Comment: This shows the urgent need for nationwide or rangewide population surveys, not BBS.

Threats to Breeding Populations (TB)

"an estimated 13,400-47,200 Soras harvested annually 1964-1976 by waterfowl hunters, and an equal number were estimated shot by non-waterfowl hunters"

Comment: Get HIP data from Paul Padding. Paul also has been collecting wings, so rail harvest can be separated by species.

...fur trapping causes accidental mortality

Comment: Probably insignificant compared to habitat loss, trapping not likely to be a threat to breeding soras because trapping seasons are usually in the late fall and winter.

+Moved this threat to TN

Threats to Non-breeding Populations (TN)

"migrations are relatively conspicuous and it occurs in concentrations at beds of wild rice, giving rise to large bags by shooters..." (Taylor 1998)

Comment: This is an anecdote, like the statement about trapping. Migrations aren't conspicuous in KS and very few hunters likely get large bags, again look at the HIP harvest data.

+Added quote to TN

Add these References:

S. M. Melvin, and J. P. Gibbs. 1994. Sora. In T. C. Tacha and C. E. Braun, eds. Migratory shore and upland game bird management in North America. Allen Press, Lawrence, Kansas.

+Added reference

Jim Hansen

emailed Jennifer Wheeler 09/27/2005

jihansen@mt.gov

I won't comment on the factor scores, but I will offer some ideas that could possibly affect them.

Hunting. As a general comment on several of the species accounts, there is more weight given to the effects of hunting on populations than I think is accurate or appropriate. We're told, for example, that "over hunting" is one of the threats to breeding populations of American coots. I understand that this was found in a species account in the literature, but that doesn't make it true that it's high enough on the list of threats to be worth mentioning.

Other such statements in the accounts include the following:

Sora - We're given some harvest estimates under "threats to breeding populations," suggesting that this is one of the major threats.

Other threats. I think that the major threat for all of the species is habitat loss and degradation.

+Habitat loss captured in profile

You might consider deleting some of the minor threats that are mentioned because they are insignificant. One example is under Soras "may be vulnerable to human/researcher disturbance." Are there enough researchers out there with the soras that this is significant?

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

Sora: threats to non-breeding population. The note on wild harvest (rice?) harvesting should probably be dropped as it is an extremely localized economic activity and it is highly unlikely that such activity has a population-level impact on this species.

+Added this threat to TN

Helen Hands

emailed to Jennifer_A_Wheeler 10/18/2005

helenh@wp.state.ks.us

1. Survey wide BBS trend for 1966-2003 is -0.44, but $P = 0.44$, so not significant. **PT should be changed to 3.**

+Marshbird Workshop agreed to PT=3;

2. PS could be 3+ because about 40,000 soras were shot in 2004, which by itself would give it a PS of 3. Considering that probably less than 5% of the population is shot (something that should be determined), then PS could be as low as 1 or 2.

+Marshbird Workshop agreed to PS=2

3. TN: season bag/hunter in most states is <10 and very few get a daily bag of 25. Thus, hunting mortality is negligible.

+Added above information to profile

4. Because PT should be changed to 3, then **concern category should be changed to moderate or low.** This species should not be of higher concern than any other marsh bird because it has a stable BBS and relatively high population. It definitely should not have the same level of concern as the whooping crane.

+Marshbird Workshop agreed to category of moderate;

Ron Bazin

emailed to Katharine Parsons Thursday, November 14, 2005

Ron.Bazin@EC.GC.CA

Population Trend

In Ontario, after comparable field effort, the SORA was recorded in a similar number of 10 km squares during the second Breeding Bird Atlas 2001-2004 (644) as compared to the first Atlas, 1981-1985 (602) (2nd Ontario Breeding Bird Atlas, in prep.)

On the Great Lakes, for the period 1995 – 2004, Archer and Timmermans (2004) reported significant declines in SORAs ranging from -5.3%/yr to -11.9%/yr as determined through their Marsh Monitoring Program (MMP).

Using Canadian BBS data, SORAs showed a non-significant increase of 1.4% per year over the long term (1968-2002) and a significant – 7.8%/yr decrease over a shorter term (1993-2002)(Downs et al. 2003)

+Added above information to profile

Interestingly both the southern US group and the Northern group suggested that the PT factor score should be a 3. The Northern group did so based on Canadian BBS data analysis showing a long-term very small (1.4%) non-significant increase (not sure what southern US group is basing their change on). However other data sets show decreases over the more recent short-term period, many of them significant (Canadian BBS short-term, MMP short-term), and even over the longer term for US BBS survey-wide (though not significant). As the Sora is probably one of the few marshbirds that can

be sufficiently monitored by BBS, these decreases noted by BBS and other studies should be strongly take into consideration, especially as these declines have been occurring most recently. As well Canada has at least 50% of population/range, and Canadian short-term data show significant decreases. As such we suggest leaving PT factor score as 4, and the species as therefore High concern.

+Marshbird Workshop agreed to PTB=3; will engage marshbird network in further discussion of this species in early 2006

Population Size

We would agree with the PS factor score of 2 as suggested by the southern US group.

Citations:

Archer, R.W. and S.T.A. Timmermans. 2004. The Marsh Monitoring Program annual report, 1995-2004: annual indices in bird abundance and amphibian occurrence in the Great Lakes basin. Unpublished report by Bird Studies Canada. xxpp.

Downes, C.M., B.T. Collins and M. Damus. 2003. Canadian Bird Trends Web site Version 2.1. Migratory Birds Conservation Division, Canadian Wildlife Service, Hull, Quebec. (http://www.cws-scf.ec.gc.ca/birds/trends/disclaimer_e.cfm)

2nd Ontario Breeding Bird Atlas. In Prep. M. Cadman et al. [Eds.] . Federation of Ontario Naturalists & Bird Studies Canada.

+Added above information to profile

+No comments/rebuttals received during March 2006 review of Canadian review team's proposed changes. Canadian review team's comments integrated into profile.

Spotless Crake

Leilani Takano; Holly Freifeld

emailed Katharine Parsons Tuesday, August 30, 2005

Leilani_Takano@fws.gov; Holly_Freifeld/PIE/R1/FWS/DOI@FWS

The following from: Mark J. Rauzon and Mino Fialua. Status of the Spotless Crake (*Porzana tabuensis*) in American Samoa *Wilson Bull.*, 115(4), 2003, pp. 489–491

+Added the following to profile BD: P. tabuensis – New Guinea, Marquesas Islands, Pitcairn Island, Tonga, Fiji islands (Rauzon and Fialua 2003)

+ Added following to profile TB: Humans and associated exotic predator species such as Norway rats, dogs, mongoose, and cats. May persist on islands with these predators by moving into wettest and most isolated areas of marsh (Rauzon and Fialua 2003).

+ Added following to profile PS: "Although widely scattered in small vulnerable populations, ...exists in virtually every major island group in the South Pacific." (Rauzon and Fialua 2003)

+Added following to profile PT: A candidate for listing under the Endangered Species Act (Rauzon and Fialua 2003).

Yellow-breasted Crake

Robert Norton

emailed Katharine Parsons October 04, 2005

geotrygon@aol.com

This species is far less reported to me as editor of the West Indies regional report. I believe this is because of its secretive habits and very few knowledgeable individuals cognizant of its status.

My assessment is based on the paucity of records and no clear indication of whether the species is threatened as a result of hunting. It enjoys a widespread tropical range with continental distribution as well as the Greater Antilles. My limited knowledge of the status in the Antilles means that I receive few reports and the species may be at least common locally where habitat is protected.

Where habitat may be a benefit to the species is where rice fields are cultivated, ex. Cuba. Other lowland and wet areas, even temporary could be areas subject to filling for development. So, while there are threats in more natural habitats, agriculture may also benefit the species. My assessment is that this species as a whole is of lower concern compared to other wetland species and warrants an overall rating of 3. However, the insular populations could be considered more of a concern simply because they are isolated subspecies. If it is possible to rate separate groups, e.g. insular from continental, I would favor a higher score for Antillean forms.

+ *Changed TB and TN factor scores to 3*

+ *Added continental info and Greater Antilles to PS*

Colombian Crake

Paint-billed Crake

Zapata Rail

Jennifer Wheeler

emailed Kathy Parsons September 2005

Birdlife's Caribbean Threatened Species Factsheets 2005. Since it's endemic, it pretty much gives the global picture!

http://www.birdlife.org/worldwide/regional/caribbean/pdfs/caribbean_threatened_species_factsheets_%202005.pdf (page 33-36).

+*Added to BD and ND: "...northern side of the 4,500 km2 Zapata Swamp, south-west Cuba." (Birdlife International 2005)*

+*Changed PT and PS: from Birdlife International 2000 to Birdlife International 2005*

+*Added to PT: "...species is more common than previously thought...still qualifies as Endangered because it is confined to a single area, where habitat loss and predation are almost certainly resulting in reduction of its very small range and population." ...decline of 1 to 9% over 10 years (Birdlife International 2005).*

+*Added reference: Birdlife International Species Factsheets 2005. Cyanolimnas cerverai. Accessed 10/2/05, <http://www.birdlife.org>*

Spotted Rail

Allan Keith

emailed to Jennifer Wheeler 10/7/05

Apologies for being slow in answering your two messages about marshbirds in connection with the upcoming waterbird conference. I must confess that I find it hard to know just how to respond. My expertise, to the extent I have any, is with the West Indies which is not broken out as a separate geographical region in your materials. For the most part, the vast majority of the species with which you are concerned are primarily winter visitors in moderate to small numbers in the Caribbean (Sora, Virginia Rail, American Bittern, etc.); only a few are resident there (Spotted Rail, Zapata Rail, Yellow-breasted Crake).

Regrettably, very little data is available on the resident species, so trying to derive factor scores for them is problematical at best. I could make some horseback guesses but they would have no scientific validity and would be entirely speculative. In many instances the West Indies populations mirror the global populations as far as population trends go, or the trends are

probably worse because of the pressure everywhere among the islands on marsh habitats. But the degrees by which the trends are worse cannot be known. There is simply no hard data, and competent censuses are lacking for most islands. As a case in point, Spotted Rail went unrecorded in Jamaica for 80 years until 1977 and has only been recorded a handful of times since. However, it seems certain that it has been present constantly for the last 200 years and is still there today in at least one place, but the size of the population and its trend are anybody's guess. This species is also present in Cuba and in the Dominican Republic but no one knows how widespread they are there, and only one or two sites are known though the bird could be much more widespread than the available records indicate. On a global basis, however, this species is widespread from Mexico south through much of South America and is not endangered in any particular way. This is just one example of the sort of difficulty I have in finding a way to respond to your request.

+Above information added to profile

Purple Swamphen

Doug Pratt

emailed to Katharine Parsons Tuesday, August 30, 2005

Doug.Pratt@ncmail.net

...if you want up-to-date information on the Purple Swamphen in American Samoa you should contact Drs. Ruth Utzurrum and Joshua Seamon who work there in the wildlife department. Their shared email is <dmwr-wildlife@samoatelco.com>. Your data sheet overlooks an important reference that can fill in some of your unknown data:

AMERSON, A. B. , JR., W. A. WHISTLER, AND T. D. SCHWANER. 1982. Wildlife and wildlife habitat of American Samoa. 2 Vols. U. S. Dept. Interior, Fish and Wildl. Serv., Washington, D. C.

+ Added reference to profile

Purple Gallinule

Helen Hands

emailed to Jennifer_A_Wheeler 09/19/2005

helenh@wp.state.ks.us

Add these References:

Helm, R. N. 1994. Purple gallinule. In T. C. Tacha and C. E. Braun, eds. Migratory shore and upland game bird management in North America. Allen Press, Lawrence, Kansas.

+Added reference to profile

Rick LWest

emailed Katharine Parsons Sunday, October 02, 2005

RickLWest@aol.com

TREND. Best answer is "unknown. trend. But surely loss of wetlands is the major driving factor. Rice cultivation will move southward to Mexico and South America, where resident populations may benefit, but not North American -- the effect of NAFTA and subsequent agreements. So if you have to state a trend, best informed one would be 4.

+Made change to PT

POP SIZE. The distribution map is a lie, but not intentional. 90% of the US birds breed within 50 miles of the Gulf Coast; 99% within 100 miles. For example, new information from AL suggests almost all their birds are in a short segment of the Mobile River just north of the I-10 causeway where the tidal fresh/salt regime provides conditions for reed beds and the channel is still sufficient to prevent eroding the shallow vegetation. Coastal populations exist in NWR impoundments, especially in Louisiana. The Louisiana refuges hold the largest population. My point is that the big southeastern range on the map hold few breeding pairs and over estimation of their population has resulted. I suggest 10,000 - 100,000 unless you are including the unknowable South American population.

+Changed PS to "2-3"

Threats to breeding population.

A new factor -- The Louisiana NWR impoundments have probably been destroyed, and they support a significant concentration of the breeding population.

+Added threat to TB

Another new factor -- shifting rice production to South America. Wet rice production is a concentrated breeding site in LA. An unknown factor that I did not research -- Fast maturing rice would allow harvest before the PUGA chicks could move. Helm mentioned this in 1982 and I have done nothing to update this. The trend is to clean lakes of vegetation so that they will be better for fish and fishing. Mentioned in my account -- Purple Swamp Hen, now regarded as congeneric with PUGA is

thriving in south Florida, but its population has not exploded -- yet. Gallinules are not placid herbivores but aggressive, opportunistic omnivores. I have little doubt the Swamp Hens would gladly eat PUGA chicks, and are big enough to bully their way to an easy meal. I think a contractor should be sent down there to study this serious potential. South Florida has a special resident population not shared with Louisiana or Texas. They begin breeding earlier in the year and are routinely multi brooded. They do not have to molt before migrating. This non-migratory population must be guarded.

+Added Swamphen threat to TB

Favorable factors for breeding populations. Hydrilla, water hyacinth and perhaps other exotics seem to favor PUGAs, both by providing a mat and food. Willing to breed in disturbed areas near humans.

Overall TB Factor score = 3 or 4

+Changed TB to "3-4"

TN 2 or 3. No worse than most other Neotropical migrants.

BD Probably 5 but maybe 4. Certainly not 3. The maps are just plain wrong. I would like to see you find one away from the Gulf coast (except possibly a staked out single pair in a NWR). They certainly are not in the interior. They are a clumsy migrant and the overshoots often end in very public places -- like at a factory or in someone's yard. These few get much publicity. Besides wrong maps, they are highly clumped in fugitive habitats subject to varying precipitation.

+Changed BD to 5

ND I have no problem with 4; maybe it should be 3. They actually may be more dispersed in winter, but they are always clumped in suitable habitat. They seem to accept a broader habitat niche in winter.

+Changed ND to 4

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

Purple Gallinule: accompanying map greatly exaggerates distribution of species inland from the coastal plain. Species is a highly localized breeder in SE MO, S IL, and TE. Under population trend delete "has apparently increased wherever rice is cultivated. This is no longer true as new varieties of rice now being cultivated do not provide the same amount of nesting cover as did older rice varieties and populations seem to be declining in this habitat in AR and perhaps elsewhere.

+Added info to PT

Helen Hands

emailed to Jennifer_A_Wheeler 10/18/2005

helenh@wp.state.ks.us

1. How few is few in regards to depredation permits? Is there any data on number of permits issued and number of birds shot? Were these permits for just PUGA? Or were these permits for coots and gallinules and the primary target was coots? Around here, very few kill depredation permits are issued. Usually (over 99% of cases) zone guns or other scare tactics are used. If PUGA populations were actually high enough to generate a crop depredation problem, perhaps they haven't declined that much.

+threat appears in peer-reviewed literature although there is no quantification of effect that assists with interpretation of significance

2. How many and how frequent is road kill of PUGA in Florida? Unless there are some data out there, my guess is that road kill and depredation permits are very minor threats.

+threat appears in peer-reviewed literature although there is no quantification of effect that assists with interpretation of significance

Common Moorhen

Jay Roberson

email to Jennifer_A_Wheeler 09/13/2005

Jay.Roberson@tpwd.state.tx.us

All text and scores appear appropriate to me except as follows.

First, generally throughout, I believe a threat that's uniformly missing for Rallidae is reliable surveys. If we have insufficient information on which to determine population trend, how can we accurately estimate and compare conservation concern?

+Included into threats section that reliable surveys are missing

Common Moorhen:

Population trend: A score of 4 (apparent decline) does not appear to be consistent with the narrative or BBS trends. I

understand this may be my bias or perception as the Common Moorhen seems to be more abundant in Texas than the Purple Gallinule (PUGA). However, the PUGA appears to be scored with less conservation concern. I suggest you either change the score to 3 or further define why you believe a decline is occurring contrary to the previous empirical BBS, CBC and range expansion narrative.

+Changed PT to 3 to reflect BBS data

Helen Hands

emailed to Jennifer_A_Wheeler 09/19/2005

helenh@wp.state.ks.us

Population Trend (PT): Need map or describe where these subspecies occur.

+ Distribution of subspecies are described in text

Population Size (PS) :

"densities: 0.04-0.05 pairs/ha (NY), 17.5-20.0 pairs/ha (FL), 0.068 adults/ha to 1.18 adults/ha (LA)..." (Bannor and Kiviat 2002), 1.5 pairs/ha (SW shore of Lake Erie (Brackney 1979), 3 pairs/ha and 10 nests/ha in PA (Miller 1946), 5.2 pairs/ha near southern Lake Michigan (Beecher 1942) (I know these are old citations, but it looks like you need some more info here.)

+Added information to PS

Threats to Breeding Populations (TB)

collection of moorhen eggs reported in Puerto Rico (Comment: Is this significant or reported here only because it was reported in the miniscule literature for moorhens?)

...some sources report that loss of natural wetlands has caused decline or disappearance of populations of *G. c. cachinnans* and *G. c. sandvicensis* (Comment: This probably the most important threat, but it's buried in the middle of the paragraph)

+Added threat about importance of wetland loss to TB

"rice harvesting is harmful to nests and young broods...habitat loss and degradation significantly affect this species (Comment: Probably more important than rice harvesting, but listed second)..."

Threats to Non-breeding Populations (TN)

hunting pressure might be too high (Comment: Who says? Look at HIP harvest data and wing collections. Harvest probably insignificant compared to habitat loss. Few states have hunting seasons and few hunt moorhens.)...

+Added information regarding light hunting to TN

Add these references:

E. D. Greij. 1994. Common moorhen. In T. C. Tacha and C. E. Braun, eds. *Migratory shore and upland game bird management in North America*. Allen Press, Lawrence, Kansas

Brackney, A. W. 1979. Population ecology of common gallinules in southwestern Lake Erie marshes. M.S. Thesis, Ohio State Univ., Columbus.

Miller. R. F. 1946. Notes on the Florida gallinule (*Gallinula galeata*) in Philadelphia County, Pa. *Auk* 27:181-184.

Beecher. W. J. 1942. Nesting birds and the vegetative substrate. Chicago Ornithol. Soc., Chicago.

+Added references to profile.

Susan M Haig

email to Kathy Parsons Thursday, August 18, 2005

susan_haig@usgs.gov ; Leilani_Takano@fws.gov

Mariana Moorhen profile. My former student Leilani Takano wrote her M.S. thesis on this species and published the following papers that may be of help:

Takano, L.L., and S.M. Haig. 2004. Distribution and abundance of the Mariana Common Moorhen. *Waterbirds* 27: 245-250.

Takano, L.L., and S.M. Haig. 2004. Inter- and Intra-island movement patterns, site fidelity, home range, and core area of the Mariana Common Moorhen. *Condor* 106: 652-664.

Takano, LL. 2003. Seasonal movements, home range, and abundance of the Mariana Common Moorhen (*Gallinula chloropus guami*) on Guam and the Northern Mariana Islands. M.S. thesis, Oregon State University, Corvallis, OR.

+Added above references to profile

In those papers, you will see that the MCMH also currently occurs on the island of Rota. And the island it used to occur on is Pagan...not Paga.

+Included Rota to profile PT

+Changed Paga to Pagan

Leilani's population estimate for them is about 287: Guam (90), Saipan (154), Tinian (41), and Rota (2).

+Inserted theses estimates into PS

The birds are declining due to wetland drainage or alteration, the introduced brown tree snake, and introduced monitor lizard.

+Added this comment to profile TB

Leilani Takano

emailed to Katharine Parsons Friday, August 19, 2005

Leilani_Takano@fws.gov

Please find attached (below) my comments on the Mariana common moorhen and Hawaiian common moorhen.

Comments by reviewer are highlighted in light grey:

Population Trend (PT)

G. chloropus sandvicensis—stable (U.S. Fish and Wildlife 2005)

“in e NA appears to have expanded its range northward during twentieth century...numerous other local changes in NA breeding distribution but only overall change during twentieth century was slight northward expansion...formerly found on all the main Hawaiian Islands except Lana'i and Kaho'olawe, now restricted to Kaua'I and O'ahu, ...BBS data 1966-1999

Comments: Delete , after Kaua'I and delete Moloka'i

+Made changes

“formerly common in Honduras; in Guatemala it was formerly uncommon and local in winter, mainly on the Pacific slope...the Mariana Is race *guami* originally occurred on Tinian, Saipan, Guam, Pagan and Rota but is now confined to Tinian, Saipan, Guam, and Rota in greatly reduced wetland habitats...*pauxilla* probably increasing in the Panama Canal area...” (Taylor 1998)

+Made changes as suggested to Pagan and included Rota for current population location

Population Size (PS)

G. chloropus guami—<375t (Takano and Haig 2004Delany and Scott 2002: Stinson et al. 1991)

Comment: Delete 300-375

+Changed 300-375 to <375

guami on Tinian (20-125 birds), Saipan (60-120 birds) (note: inter-island movement occurs between Tinian and Saipan so numbers fluctuate depending on the season (i.e. dry and wet season).. however, Saipan holds most of the population. , Guam (100-125 birds). Rota (2)...the race *ceceris* is common in Puerto Rico but less so in the Virgin Is...the race *pauxilla* is locally common in Panama...” (Taylor 1998)

Comment: Delete 200 from Rota

+See S. Haig

Threats to Breeding Populations (TB)

...modest levels of contaminants found in tissues...food supply of Hawaiian Common Moorhen believed diminished by pesticides (note: don't think this is a current threat)...some sources report that loss of natural wetlands has caused decline or disappearance of populations of *G.c. guami*, *G. c. cachinnans* and *G. c. sandvicensis*...

“rice harvesting is harmful to nests and young broods...habitat loss and degradation significantly affect this species...lack of good habitat on Molokai precludes development of a significant population (note: No population exists on Molokai. Moorhens disappeared in 1940s and was reintroduced in 1980s but failed to get established)...potential threats from introduced predators...possibly from poaching...species readily exploits newly created habitats and is tenacious in occupied areas...

+Corrected spelling error in “species” in TB

Add these References:

Takano, L. L., and S. M. Haig. 2004. Distribution and Abundance of the Mariana Subspecies of the Common Moorhen. *Waterbirds* 27(2): 245-250.

U.S. Fish and Wildlife. 2005. Draft Revised Recovery Plan for Hawaiian Waterbirds, Second Draft of Second Revision. U.S. Fish and Wildlife Service, Portland, Oregon. 155 pp.

+Added these references to profile

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

Common Moorhen—not sure where statement “in e NA appears to have expanded its range during twentieth century” comes from but this is not true in the Upper Midwest, Ontario, or Vermont which are the northern limits of the species today: Douglas Kibbe in *The Atlas of Breeding Birds of Vermont* (1985) notes “Common Moorhens have been considered rare and local in Vermont since the 1800s(Allen 1909), a status they still hold today.

In *The Atlas of Breeding Birds of Ontario* the authors note that the project confirmed the breeding range of the species as defined by earlier authors but did not note any change in breeding distribution. The Birds of Michigan (1994) notes a similar distribution to the historical distribution except in lower numbers and fewer locations because of the loss of similar habitat. Largest loss of breeding range appears to be in Ohio where Peterjohn (The Birds of Ohio, 2001) noted that moorhens are now rare and locally distributed in interior western and central Ohio where formerly locally common and much reduced in the Lake Erie marshes. Similar patterns exist in the literature for Iowa, Indiana, and Wisconsin.

+ Added comment regarding loss of breeding range in Ohio to profile PT

Leilani Takano

emailed to Jennifer Wheeler 10/11/05

I relooked at the common moorhen, Guam rail, and Hawaiian coot. They look fine.

The only question or concern I had was regarding the Conservation Concern Category and the lumping of the subspecies. For example, for the Common Moorhen there are seven subspecies within the plan area. Most of the subspecies' population trends are unknown, except for the Hawaiian common moorhen and Mariana common moorhen. The Common Moorhen Conservation Concern Category is listed as "Moderate Concern". I understand that the N. American Common Moorhen is expanding its range. Is there a way to address the Mariana and Hawaiian subspecies separately? Surely, their Conservation Concern Category is not Moderate.

+ Recognize that a continental assessment is difficult for species with subspecies complexes of variable status. Regional working groups identify conservation priorities and actions based on subspecies status. Therefore Mariana and Hawaiian subspecies' rank would be elevated in Pacific Islands plan.

Helen Hands

emailed to Jennifer_A_Wheeler 10/18/2005

helenh@wp.state.ks.us

1. Different species may have very different population trends, so PT score for the entire population may be meaningless because of its 7 subspecies in the plan area.

+ Marshbird Workshop agreed to PT=3. Recognize that a continental assessment is difficult for species with subspecies complexes of variable status. Regional working groups identify conservation priorities and actions based on subspecies status

2. How significant is egg collection in Puerto Rico?

+threat appears in peer-reviewed literature although there is no quantification of effect that assists with interpretation of significance

Ron Bazin

emailed to Katharine Parsons Thursday, November 14, 2005

Ron.Bazin@EC.GC.CA

Population Trend

Great Lakes Marsh Monitoring Program, decrease in annual population index (-3.5%/yr, 1995-2004, $p=0.059$ (Archer and Timmermans 2004).

BBS data for Canada, significant decrease in annual population index (-4.8%/yr, 1968-2002) (Downes et al. 2003).

+Added above information to profile

As Canada has only a very small portion of the overall breeding range, these numbers, though significant, would not warrant a change to the PT factor score.

Citations:

Archer, R.W. and S.T.A. Timmermans. 2004. The Marsh Monitoring Program annual report, 1995-2004: annual indices in bird abundance and amphibian occurrence in the Great Lakes basin. Unpublished report by Bird Studies Canada. xxpp.

Downes, C.M., B.T. Collins and M. Damus. 2003. Canadian Bird Trends Web site Version 2.1. Migratory Birds Conservation Division, Canadian Wildlife Service, Hull, Quebec. www.cws-scf.ec.gc.ca/birds/trends/default_e.cfm

+Added above information to profile

Hawaiian Coot

Doug Pratt

emailed to Katharine Parsons Tuesday, August 30, 2005

Doug.Pratt@ncmail.net

I suggest you contact Peter Donaldson, regional editor for North American Birds, as one who could do a better job than I. His email is <dnldsn-5@hawaii.rr.com>.

Doug Pratt

emailed to Katharine Parsons Monday, September 12, 2005

Doug.Pratt@ncmail.net

I have reviewed the Hawaiian Coot assessment and have only one suggested change. The first category (Population Trend) should be rated 3 instead of 4. Although there are large year-to-year fluctuations, I see no overall decline in this species over the past 2 decades, and there may, in fact, be a small increasing trend because some new refuges have been created. My opinion is not based on hard census data, which you would have to obtain from the State of Hawaii wildlife officials who conduct annual censuses.

+ Made change as suggested; changed profile PT to 3

Lehr Brisbin

emailed to Katharine Parsons Wednesday, September 21, 2005

Brisbin@srel.edu

In summary then thus far, considering the Hawaiian form to be its own distinct species, I concur with all of the rankings given. You might want to add however, that our BNA account also concurs with the PS value of 2,000-4,000 birds.

+Included concurrence with BNA account into profile PS

American Coot

Spencer.Vaa

emailed to Jennifer_A_Wheeler 09/13/2005

Spencer.Vaa@SDSTATE.EDU

I think the language stating that coot breeding populations may decline because of over hunting is not supported by fact and therefore should be deleted. Preliminary harvest estimates for the 2004-05 hunting season estimate a U.S. harvest on coots of 181,300 birds out of a population of > 6 million (Delany and Scott 2002). Fact is, they are a very lightly harvested species. The Profile is dead on when it states that "losses have occurred due to extensive wetland drainage".

+Included US harvest information in profile TN

Christopher Rustay

emailed to Jennifer_A_Wheeler; Katharine Parsons Thursday, August 25, 2005

christopher.rustay@pljv.org

AMCO -

1) Why, if we are only looking at the 1970's forward, isn't a 2 warranted for PT based on the quotes provided?

2) Unsure why TN score is a 4 as the quotes provided use the words "may" and "possibly". Wintering populations should likely be assessed at a continental scale rather than looking at any particular region. Drought could simply move birds out of one region to another, as often happens in the Southern Great Plains.

+ Comments regarding AMCO: The draft PT score of 3 is primarily based on the 2002 publication (based on Sauer's BBS analysis) reporting AMCO "stable." Throughout the quoted material, one finds references to increasing, stable and decreasing segments of populations since the late 1960s. The quoted comments on threats to non-breeding populations refer to being "possibly due to wetland destruction" and "may" result in collision deaths. The draft TN score of 4 suggests that the potential for adverse impacts to coots as a result of wetland destruction does exist, since it's clear that wetland habitats have been and continue to be degraded/destroyed. However, if there are additional references or expert opinion that show coots not affected by habitat loss, we will include those and adjust the factor score.

Helen Hands

emailed to Jennifer_A_Wheeler 09/19/2005

helenh@wp.state.ks.us

Threats to Breeding Populations (TB)

“losses have occurred due to extensive wetland drainage...local populations of coots are extremely vulnerable to heavy shooting...wetland loss has reduced the potential breeding population in regions such as IA and MN...” (Taylor 1998)

Comment: Probably few coots are shot on the breeding grounds, most are shot after migrating, so shooting not really a threat to breeding populations

+Moved portion regarding hunting to profile TN

“densities fluctuate in response to seasonal precipitation...declines result from loss of wetlands and over hunting...currently probably under harvested...elevated levels of selenium in eggs...” (Brisbin et al. 2002)

Comment: This contradicts Taylor (1998) above. Look at USFWS May Waterfowl Population Survey and USFWS Harvest surveys and you'll see that coots aren't over hunted.

+See S. Vaa

DRAFT TB FACTOR SCORE=4

Comment: Most significant threat is wetland loss, but coots are doing very well, so I don't think they warrant a TB Factor Score of 4, probably more like a 2.

+Majority of experts are OK with factor score of 4; are coots doing well in US only or all over?

DRAFT TN FACTOR SCORE=4

Comment: See comment on TB Factor. This should probably be a 2. Coots can take deeper water than puddle ducks so I think they're more adaptable in the types of wetlands they use, so not as threatened by habitat loss as puddle ducks could be.

References:

Add to references: Alisauskas, R. T., and T. W. Arnold. 1994. American coot. In T. C. Tacha and C. E. Braun, eds. Migratory shore and upland game bird management in North America. Allen Press, Lawrence, Kansas.

+Added reference to profile

Lehr Brisbin

emailed to Katharine Parsons Wednesday, September 21, 2005

Brisbin@srel.edu

Now when it comes to the mainland American Coot, I have some serious concerns that something BAD has been going on over the past 3-4 years that has caused truly significant declines in the numbers of birds wintering inland here in South Carolina and Georgia. It is a real shame that after carefully conducting aerial census counts of coots and other waterfowl for over 30 years here on the U.S. DOE Savannah River Site, starting with 9-11, 2001, all census flights over this former nuclear industrial site were discontinued for security reasons, and now budget cuts probably mean that they will never be resumed. I do know however, that in reservoirs that used to regularly see 3,000-5,000 coots every winter, there are now only a few hundred and at some times in some places, none at all!

+Included information on regional decline into profile

+Changed PT to 4

I now find myself really wondering how general this phenomenon has been lately across other parts of the species' breeding and wintering range. I am still collecting some limited data from aerial censuses of water birds off of the Savannah River Site, in wetlands near the runways of the Augusta Georgia airport, and the same dramatic decrease has also occurred there (but in that case from maximum numbers of 350-450 birds per census flight, down now to 100 or less.

All of this has occurred after the outbreak of the mysterious malady known as avian vacuolar myelinopathy (AVM) which is better known for causing significant die-offs of Bald Eagles, but which seems to first preferentially target coots, with the eagles then feeding upon the affected coots. All of the concern with regards to this disease outbreak (the cause of which, as far as I know, has never yet been determined) has been focused on the eagles – after all, who cares about coots anyway? Well – I think that maybe we all should, and I would suggest that if the population declines that I am seeing here are mirrored elsewhere in data sets such as the Fish And Wildlife Service's (U.S. FWS) Midwinter Flyway Counts, or Christmas Bird Counts, then the “PT” scores of the NAWCP assessment should be increased to 4 or possibly 5, and the conservation concern status be changed accordingly.

Jim Hansen

emailed Jennifer Wheeler 09/27/2005

jihansen@mt.gov

Habitat restoration

Only once (purple gallinule), I believe, is it mentioned that wetland restoration and creation offset some of the habitat losses. One place, among others, that this would surely be important is for the American coot.

+Added comment re: wetland restoration offsetting losses to TB

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

American Coot: threats to nonbreeding populations. Major decline at Back Bay NWR of large wintering flock said to be related to decline in water quality (pers. comm. with refuge biologist).

+Added comment to TN

Larry Neel

emailed to Jennifer Wheeler 10/6/05

We at NDOW are a little surprised to see American Coot on the list of "High Concern". That sure isn't our impression in Nevada or (I think) in the Pacific Flyway. Is your team sure they have thought that one through all the way? My guess is you may catch a little flak over that one. Otherwise, I am pretty much in agreement with the status assessment. I hate to miss such an interesting meeting, but I will be taking some hard-earned leave after delivering the Nevada CWCS to Federal Aid last month.

Hope you are doing well and that you are pleased with the progress of the Waterbird Plan. These marshbird assessments are very important and exciting.

RESPONSES:

+From Jennifer: Thanks for the feedback. High Concern is a result of the Population Trend and Threats, despite the species being abundant and widespread. Have you had a chance to look at the profile; would you recommend any changes in scores? Or is it just how the category shakes it?

+From Kathy: Thanks Larry for flagging that one. We'll make sure it gets extra scrutiny in the workshop next week.

+Following the Marshbird Workshop, interim category placement is Low-Moderate; will engage marshbird network in further discussion of this species in early 2006

Troy Corman

emailed to Jennifer Wheeler 10/13/05

I appreciate the opportunity to review the draft species status assessment for the solitary breeding waterbirds. Overall, I feel everyone has done a wonderful job in compiling and summarizing this information. Unfortunately, I will not be able to make the Waterbird Society meeting, but would like to provide a few comments and suggestions:

I understand there is some concern for declining American Coot populations in regions of eastern N. America, but it is difficult for me to justify this species as being listed at a "high concern" level. Particularly when this is the same level as for the Whooping Crane. In southern and western regions of Arizona, American Coots winter abundantly in urban ponds and lakes. This includes many thousands in the greater Phoenix area alone. They also breed commonly in almost any freshwater marsh in the state, including in urban settings such as golf course ponds and residential lakes where emergent vegetation is present.

Thank you again for this opportunity and please contact me if you have any questions in regards to this information.

+Following the Marshbird Workshop, interim category placement is Low-Moderate; will engage marshbird network in further discussion of this species in early 2006

Helen Hands

emailed to Jennifer_A_Wheeler 10/18/2005

helenh@wp.state.ks.us

1. Why was PT score raised from 3 to 4? BBS trend survey wide for 1966-2003 was -0.75, but $P = 0.31$, so not a significant decline. Sample size is relatively high so BBS may be as good an indicator of a stable population as we can find. You also might try analyzing the May Waterfowl Population Survey data available at the second website listed in the general comments paragraph above. **Change PT to 3**

+Marshbird Workshop agreed PT=3

2. Coot abundance on Mid Winter Waterfowl Survey should be re-analyzed to include data through 2004, similar to what was done in Alisauskas and Arnold (1994) on p. 136. This would give up-to-date trend information for the U.S. Coots do winter in Central America, so it is possible that declines in Mid Winter Survey could be due to shift in winter distribution.

+ Will engage marshbird network in further discussion of this species in early 2006

3. **This species should definitely not have the same level of concern as the whooping crane.** I suggest moving it to the low or no concern category.

+ Interim category placement is Low-Moderate; will engage marshbird network in further discussion of this species in early 2006

Ron Bazin (Canadian Review Team)

emailed to Katharine Parsons Thursday, November 14, 2005

Ron.Bazin@EC.gc.ca

Population Trend

Combined waterfowl breeding population survey data for survey regions within Canada and the U.S. PPR indicate population estimates for 2005 (1,376t), 2004 (1,634t), and the 10-year mean (2,052t) represent 3%, 23%, and 54% increases respectively compared to the long-term mean, 1958-2005 (1,332t) (USFWS and CWS 2005).

BBS data for Canada slight non-significant increase in the population index (0.6%/yr, 1968-2002) (Downes et al. 2003).

Great Lakes Marsh Monitoring Program, non-significant decrease in annual population index (-2.1%/yr, 1995-2004 (Archer and Timmermans 2004). Great Lakes region supports small component of continental breeding population (S. Timmermans, pers. comm.)

+Above information added to profile

Strong evidence for increasing PT from highly developed , extensive and long-term surveys throughout Canadian and northern US portion of range clearly indicate that PT score should be 2 for northern portion of range.

+Marshbird Workshop agreed to PT=3; Will assign interim factor score of 2-3 and engage marshbird network in further discussion of this species in early 2006

Threats to Breeding Populations

Main concentration of breeding population is associated with the PPR and surrounding region. Densities within core area have fluctuated in response to moisture conditions. Habitat preference is for more permanent wetlands, so less threatened by habitat loss due to agricultural draining in the PPR. This supports a lower TB score (ie 2).

+Marshbird Workshop agreed to TB=4; Will engage marshbird network in further discussion of this species in early 2006

Threats to Non-breeding Populations

According to the table that I have, it is the Tropics group that suggested that this score should be a 3. They would need to provide evidence for this, and the southern US group should be asked again as to what score they feel should be here. All other scores remaining as is, the TN factor score would determine whether the AMCO is a Low Concern (TN=4) or a Not Currently at Risk (TN=3).

+Marshbird Workshop agreed to TN=3; Will engage marshbird network in further discussion of this species in early 2006

Citations

Archer, R.W. and S.T.A. Timmermans. 2004. The Marsh Monitoring Program annual report, 1995-2004: annual indices in bird abundance and amphibian occurrence in the Great Lakes basin. Unpublished report by Bird Studies Canada. xxpp.

Downes, C.M., B.T. Collins and M. Damus. 2003. Canadian Bird Trends Web site Version 2.1. Migratory Birds Conservation Division, Canadian Wildlife Service, Hull, Quebec. www.cws-scf.ec.gc.ca/birds/trends/default_e.cfm

United States Fish and Wildlife Service and Canadian Wildlife Service. 2005. Waterfowl breeding population survey regional field crew reports. www.fws.gov/migratorybirds/reports/reports.html

+Above references added to profile

Survey Region	2005				% change from		
	#	#	2004 10-year mean	Long-term mean	2005 and Long-term	2004 and Long-term	10-year mean and Long-term
S. Man.	184.6	114.8	291.7	212.7	-13%	-46%	37%
N. Sask., N. Man.	16.3	74.4	41.9	58.7	-72%	27%	-29%
N. Alb., N.E. B.C., NWT	4.9	66.6	54.3	55.1	-91%	21%	-1%
S. Sask.	806.9	536.3	757.7	447.4	80%	20%	69%
S. Alb.	240.9	240.2	291.2	231.4	4%	4%	26%
W. and C. Ont.*		0	1.0				
E. Ont, NY*		0	4.2				
CND Subtotal	1253.6	1032.3	1436.8	1005.3	25%	3%	43%
N. Dka.	84.4	525.8	856.5	397.3	-79%	32%	116%
S. Dka.	32.5	32.2	321.2	194.5	-83%	-83%	65%
Mont.	5.1	43.4	52.8	62	-92%	-30%	-15%
US Subtotal	122	601.4	1230.5	653.8	-81%	-8%	88%
Total	1375.6	1633.7	2052.05	1332.2	3%	23%	54%

*2004 data, 14 year mean, not included in subtotal or total

Reference: United States Fish and Wildlife Service and Canadian Wildlife Service. 2005. Waterfowl breeding population survey regional field crew reports. <http://www.fws.gov/migratorybirds/reports/reports.html>

Central Quebec, Maine and Maritime survey results are 0
Alaska and Yukon survey results were unavailable at time of summary

+No comments/rebuttals received during March 2006 review of Canadian review team's proposed changes. Canadian review team's comments integrated into profile.

Caribbean Coot

Robert Norton

emailed Katharine Parsons October 04, 2005

geotrygon@aol.com

As for Caribbean Coot, I think this species will be more threatened if that is possible as time passes, and it passes at varying rates in the West Indies. I hope that somehow there would be some universal approach to protection measures such as model language that local governments can adopt into their codes for development or habitat protection or whatever legal venue so that local land managers or concerned government officials can work into their respective land development codes, etc some immediate relief. This could also be advanced by the appropriate NGO if there is one. If it looks like some property rights are going to be affected, then perhaps some incentives can be worked in to provide more density or economic gain by setting aside habitat and thus gain some other value for lost use of property.

In the 24+ years I have been reporting on the birds of the West Indies, notwithstanding the spotty coverage, I have not received reports that exclaim any abundance of this species. This species has close relationship with American Coot and may pose identification problems. Non-the-less, Caribbean Coot is outnumbered in the reports I receive by recognizable characters of American Coot. When there is confidence in the report on *F. caribbea*, numbers are far less.

The threats to this species are primarily two-fold, a third more a little more subtle. Where the species may become locally common, it is hunted to exclusion, at least temporarily. It is slow moving and non-cryptic which does not serve it well. Its distribution is coincident with human populations that hunt year-round and do not limit their take for conservation purposes.

+Added comment to TB

Waterfowl in general are taken for subsistence, not sport. Secondly, its habitat represents low-lying coastal areas which are a prime target for dredge and/or fill for development. Thirdly, and perhaps less obvious, is hybridization with *F. americana*. (Norton 1984).

These three conditions could lead to either a slow or rapid disintegration of the species. I would put the species in a category of quite vulnerable, if not threatened. I think near threatened is not a strong enough assessment. I think this species will not be able to maintain its genetic identity without stringent conservation measures to allow the species to breed and also be protected in the non-breeding season.

My assessment is that this species deserves a rating of 5 across the board and be considered threatened.

+ Comment: All PT, TB, TN, BD, ND factor scores are 5; considered "Highly Imperiled"

HELIORNITHIDAE

Sungrebe

GISSELLE ALVARADO QUESADA

emailed to Katharine Parsons Tuesday, August 30, 2005

octrop@racsa.co.cr

Population trend (PT).

Draft PT Factor Score=?. I am agree.

Population Size (PS)

Draft PS Factor Score= ?. I am agree.

Threats to Breeding Population (TB).

Draft TB Factor Score = ?. I will write 4. In Costa Rica distribution is very restricted and besides tourist boats can destroy nests and eggs. Habitat drainage and sedimentation can affect the specie. Some of its factors can be effecting now but we have not a written study or are already tested.

+Changed TB to 4

+Included threats to profile TB

Threats to Non-breeding Populations (TN).

Draft TN Factor Score= ?. I will write 4. . Habitat drainage and sedimentation can affect the specie. Some of its factors can be effecting now but we have not a written study or are already tested.

+Changed TN to 4

+Included threats to profile TB

Breeding and Non Breeding distribution.

I consider distribution in Costa Rica it is more restricted.

EURYPYGIDAE

Sunbittern

GISSELLE ALVARADO QUESADA

emailed to Katharine Parsons Tuesday, August 30, 2005

octrop@racsa.co.cr

Population Trend (PT).

Draft PT Factor Score= ?. I am agree.

Population Size (PS).

Draft TB Factor Score= ?. I am agree.

Threats to Breeding Populations (TB)

Draft TB Factor Score= ?, I will write 4: Deforestation and contaminants. It specie depends from forest edge rivers (lives, to breed). We have a law which prohibit the tree cuts along river edges, but still some deforestation occurs along its, National Park guards are not enough to take care all areas and private lands, and of course some chemicals can go to water courses.

+Changed TB factor score to 4

+Added deforestation and contaminants to threats

Threats to Non-breeding Populations (TN)

Draft TN Factor Score: ?. I will assign 4.

+Changed TN factor score to 4

+Added deforestation and contaminants to threats

Breeding distribution (BD) and Non-breeding Distribution (ND).

Studding the map the breeding and non.breeding: I consider the breeding and non-breeding area are smaller, for example in AOU, Ornithologist Union, said specie breeds along both slopes, but the breeding distribution it is smaller, it can

breed in special in foot of mountains at the Caribbean side and in some places of the Pacific Slope in particular some forested areas of North Pacific and South Pacific and probably in Central Pacific (That's I think to study next year). HOWEVER, I UNDERSTAND IT SMALL DIFFERENCES DOESN'T MEAN TOO MUCH TO THE TOTAL AREA ESTIMATION YOU DID. JUST CHANGE A LITTE THE MAP.

ARAMIDAE

Limpkin

GRUIDAE

Sandhill crane

Jay Roberson

email to Jennifer_A_Wheeler 09/13/2005

Jay.Roberson@tpwd.state.tx.us

Population trend:

Some authorities (Walkinshaw 1973, Johnson and Stewart 1973, Guthery and Lewis 1979) recognize and suggest management of three subspecies of the Mid-continent sandhill cranes: lesser (*Grus canadensis canadensis*), Canadian (*G. c. rowani*), and greater (*G. c. tabida*) based on differences in morphometrics and breeding ranges. However, more recent genetic studies using mitochondrial DNA (Rhymer et al. 2001, Glenn et al. 2002, Peterson et al. 2003) and nuclear DNA (Jones 2003) suggest that two subspecies occur in the MCP: lessers and greater. Sandhill cranes formerly within the rowani subspecies are grouped with tabida (Rhymer et al. 2001, Glenn et al. 2002), but Peterson et al. suggest that rowani is intermediate between canadensis and tabida. In any case, the fact that the prior recognized subspecies by phenotype may not be reflected in genotype, should eliminate conservation concern for *G. c. rowani* and possibly for the smaller and more geographically restricted *G. c. tabida*. In addition, because this subspecies comprises most of four other populations (Eastern, Rocky Mountain, Central Valley, Lower Colorado River Valley), it should further reduce conservation concern.

Glenn, T. C., J. E. Thompson, B. M. Ballard, J. A. Roberson, and J. O. French. 2002. Mitochondrial DNA variation among wintering mid-continent Gulf Coast sandhill cranes. *Journal of Wildlife Management* 66:339-348.

Jones, K. L. 2003. Genetic variation and structure in cranes: A comparison among species. PhD Dissertation. Univ. Illinois, Chicago. 142pp.

Peterson, J.L., R. Bischof, G.L. Krapu and A.L. Szalanski. 2003. Genetic variation in the Midcontinent population of sandhill cranes, *Grus Canadensis*. *Biochemical Genetics* 41(1/2):1-12.

Rhymer, J. M., J. G. Fain, J. E. Austin, D. H. Johnson, and C. Krajewski. 2001. Mitochondrial phylogeography, subspecific taxonomy, and conservation genetics of sandhill cranes (*Grus canadensis*; Aves: Gruidae). *Conservation Genetics* 2:203-218.

Tacha, T. C., S.A. Nesbitt, P.A. Vohs. 1994. Sandhill crane. Pages 77-94 in T. C. Tacha and C. E. Braun, eds. *Migratory Shore and Upland Game Bird Management in North America*. International Association of Fish and Wildlife Agencies, Washington, D.C.

+Added references

Also, you should refer to and cite the USFWS trend summary and status report on Midcontinent sandhill cranes

<http://migratorybirds.fws.gov/reports/status05/SREP05.pdf> and the USFWS harvest report

<http://migratorybirds.fws.gov/reports/whs/Sandhill%20crane%20harvest%20and%20hunter%20activity%20in%20the%20Central%20flyway%20during%20the%202004-2005%20hunting%20season.pdf>.

+Added this referenced website

In these reports I believe you will find that the most recent (10-year) trend is stable for the Mid-continent and Rocky Mountain populations. In Tacha et al. (1994:84) and more recently (Delaney and Scott 2002) you may find that some resident or smaller populations (Cuban, Mississippi, Eastern, Florida, and Central Valley) are increasing. However, I believe the larger combined Mid-continent, Rocky Mountain, and Lower Colorado River Valley populations are stable. Therefore, I would recommend a score of 3 rather than 2. Also, I would suggest that *G. c. canadensis* status is not "unknown", but more than likely "stable."

+Changed PT factor score to 3

+Changed G.c. Canadensis status to "stable" in PT

Population status:

Please see Tacha et al. (1994:84) for the most current (1993) explicit population size, which I think for most populations is still fairly accurate. However, for the Gulf Coast subpopulation of the Mid-continent population composed primarily of *G. c. tabida* is much larger than 30,000. TPWD aerial transect and mid-winter waterfowl surveys indicate that this subpopulation is as much as three times larger (TPWD unpubl. data 1997). Also, I believe Dr. Gary Krapu (Northern Prairie Wildlife Science Center, USGS-BRD, Jamestown, ND 701/253-5536) who has extensively studied the subspecies composition and breeding range of *G. c. canadensis*, *G. c. rowanii*, and *G. c. tabida* in the Central Flyway or Mid-continent population, has more accurate and current estimates of population size. However, I suspect he will suggest that *G. c. rowanii* does not functionally exist, therefore has no members, and that *G. c. canadensis* has about 500,000 members. I also think he will suggest that *G. c. tabida* in the Mid-continent population has close to 90,000 members. This does not including the 18,000 from the Rocky Mountain population, the 7,000 from the Central Valley population, the 2,000 from the Lower Colorado River Valley population and the 30,000 from the Eastern population. Therefore, I agree with a PS score of 2.

Threats to breeding populations:

Hunting may have led to the extirpation of Greater sandhill cranes from many parts of their breeding range but I suggest this must have been prior to full protection by the Migratory Bird Treaty Act in 1916. Legal sandhill crane hunting was prohibited from 1916 to 1961. I challenge anyone to prove that limited and regulated sport harvest as stipulated by federal regulations of the Division of Migratory Bird Management of the USFWS since 1961 has led to any decline in any population of sandhill cranes. Poaching or unlawful shooting of the smaller resident populations may still be a problem and risk but I suggest a distinction should be made between 'unlawful shooting' and 'regulated legal sport harvest.' Why? Because the solutions or remedies are different. For unlawful shooting we increase enforcement effort or fines/penalties. For over-harvest during legal sport hunting seasons, we simply reduce the daily bag limit or season length.

+Summarized the hunting comments as "poaching or unlawful shooting of the smaller resident populations may still be a problem and a risk...however 'regulated legal sport harvest' not a threat due to the ability to manage populations by reducing daily bag limit or season length..."(Roberson pers comm.) and added to TB

For an assessment of significant risks to sandhill cranes in the Mid-continent population please visit with Dr. Krapu and see the draft Mid-continent Sandhill Crane Management Plan (see Mike Syzmanski, technical chair of the Plan writing committee, 701/328-6360). I suggest that these hazards are significant and include change in land use from corn to soybeans, de-watering of the Platte River and Playa lakes of the High Plains of western Texas due to declining aquifers, elimination of rice subsidies and consequent reduction in rice acreage along the Texas Gulf Coast, etc. These eclipse hunting as potential limiting factors. Therefore, I suggest that the Threats score should be "4", not "2".

+Summarized these threats as "change in land use from corn to soybeans, reduction in rice acreage along Texas Gulf Coast, and de-watering of the Platte River and Texas High Plains playa lakes are significant threats to the Mid-continent population..."(Roberson pers comm.) and added to TB.

+Changed TB factor score to 4

Threats to non-breeding populations:

I could not locate the quote: "mortality associated with hunting also regulates size of mid-continent population..." in Tacha et al. (1992).

+Quote on page 16 under population regulation

They did say that "[L]ow recruitment rates...emphasize the need for careful management of the mid-continent population that is hunted...The size of both the Western and (particularly) Gulf Coast subpopulations, and their harvest rates, need to be closely monitored...Substantial improvement in annual surveys are needed to monitor subpopulation trends with acceptable accuracy and precision." Therefore, hunting could regulate size of the mid-continent population because of the species' inherent low recruitment rates and long reproductive life but I don't think it has been proven to support an absolute statement.

Second, this quote applies specifically to breeding populations as it is linked by context to "Recruitment rates..." not to non-breeding populations so I wonder if this is the appropriate section for that statement.

Third, your Conservation Status Assessment document defines 'threats to non-breeding populations' as "...threats known to exist for each species during their non-breeding season." Therefore, it does not necessarily seem to be geographically distinct or separate from "breeding" areas? For example, ground water recharge of the Ogallala aquifer may be very important to number and extent of saline and playa lakes in the High Plains of West Texas used by wintering cranes, but that depletion and slow recharge is occurring in summer when the cranes are in Canada, Alaska and Siberia. This could also be said for the Platte River, NE. Decisions about dams and diversion for agricultural irrigation occurs year round including the summer when the cranes are on northern breeding grounds can affect available water and brush encroachment that affect crane use during spring staging. Also, you may want to make it clear that you are not referring to different threats by cohorts within the year-round population. Legal sport harvest is not allowed during the breeding season March 10 - September 1. And, I don't find

any particular hazard due to legal sport hunting to non-breeding cohorts of the populations that don't also relate to breeding cohorts. High harvest rates of subadults certainly would have a depressing effect on future recruitment but it would not be as imminent as to breeding cohorts (>5yrs old). Also, habitat loss and fragmentation threats to breeding cohorts are the same as for non-breeding cohorts and should score "4" instead of "3."

+Changed TN to 4

+Added habitat loss and fragmentation as a threat to both TB and TN

Non-breeding distribution:

I'm curious how a "non-breeding" (winter?) distribution area of up to 4.2M sq km (1.6M sq mi) can be described as "local" for any waterbird species or population. That's over six times larger than the State of Texas. I wouldn't call winter distribution of sandhill cranes in nine states and one foreign country (MX) 'local.' Perhaps there is a better descriptor such as 'regional'. And, the size of this area is obvious larger than the shaded 'wintering areas' on the illustration or map. On this illustration the winter distribution of sandhill cranes in the Mid-continent population is too restricted to represent 1.6M sq mi. Please see Dr. Krapu, the draft Mid-continent Sandhill Crane Management Plan, or Tacha et al. (1994:85) for much more accurate illustration of the winter distribution of sandhill cranes.

+See Assessment process for BD and ND

Spencer.Vaa

emailed to Jennifer_A_Wheeler 09/13/2005

Spencer.Vaa@SDSTATE.EDU

In regards to Sandhill Cranes, I also don't like the language that says that overhunting poses a potential threat. The Flyway Councils and the FWS have a cooperative Management Plan for the Mid-continent population of Sandhill Cranes that prevents the population from declining below objective levels. The FWS publication entitled "Status and Harvest of Sandhill Cranes" is a good source of information for this highly esteemed bird. Thank you for the opportunity to comment.

+Added reports; See J. Roberson (Sandhill Crane)

Steve Maxson

email sent to Kathy Parsons Wednesday, August 24, 2005

steve.maxson@dnr.state.mn.us

I have looked over the Sandhill Crane profile and have a few quick comments. Meine and Archibald 1996 is not listed in the References.

+Meine and Archibald 1996 is source cited in Delany and Scott.

Under PT - The second part of the Ellis quote doesn't seem to make sense. Were they saying that formerly the Cuban Sandhill was probably more widely distributed ... ?

+Yes

Under PS - What about citing some of the annual Status and Harvests of Sandhill Cranes (Administrative Reports published by DMBM)? For example, the 2004 report states that the Mid-Continent Population (by far the largest N. American population) is comprised of about 2/3 G.c. canadensis, 1/4 G.c. rowani, and the rest G.c. tabida. This doesn't fit very well with the PS figures you list that estimate 450,000 G.c. rowani. This number seems much too large. I think you need to reconcile this number with the numbers in the Administrative Reports.

Under TB - I'm concerned that the Ellis quote sends the wrong message about hunting. Surely they were referring to unregulated hunting.

+ See J. Roberson (Sandhill Crane)

Under TN - Again, I'm a bit uncomfortable with the Ellis quote regarding hunting. I would agree that overhunting (if allowed to occur indefinitely) could pose a threat. However, hunting harvest of cranes is monitored and regulated by the states, Flyways, and the USFWS. If overhunting becomes a problem, regulations will be changed to reduce harvest. I would not consider regulated hunting to pose a threat to crane populations.

+Added this comment to TN

Under BD - I'm not clear about the breeding distribution description for tabida. Does "Mid-continental NW N America" include Minnesota, Wisconsin, Michigan, and Ontario?

Larry Roberts

emailed to Jennifer_A_Wheeler 09/20/2005

Larry.Roberts@wgf.state.wy.us

Sandhill Crane

USFWS Administrative Reports should be source reference for population size. Hunting is listed as the leading factor in the reduced distribution of greater sandhill cranes. This might be true for market hunting. I suggest that market hunting replace hunting. The size of the mid-continent population is regulated by weather and habitat conditions. The annual harvest rate of this population is too low to regulate population size.

+Added the hunting comment and threat to populations to TB section
+Added USFWS reference

Overall, I support this initiative and what has been done to date.

Helen Hands

emailed to Jennifer_A_Wheeler 09/19/2005

helenh@wp.state.ks.us

Population Trend (PT)

G. canadensis tabida—increasing (Delany and Scott 2002; Meine and Archibald 1996)

Comment: Mid-Continent population, which includes *canadensis* and *tabida* is stable (see USFWS Status Report of Sandhill Cranes 2005), recent genetic research has concluded that *rowani* doesn't exist, these birds mostly *tabida*. See

Peterson, J. L., R. Bischof, G. L. Krapu, and A. L. Szalanski. 2002. Genetic Variation in the Midcontinental Population of Sandhill Cranes, *Grus Canadensis*. *Biochemical Genetics* 41:1-11.

Johnson, D. H., J. E. Austin, and J. A. Shaffer. 2003. A fresh look at the taxonomy of Midcontinental Sandhill Cranes in 2003 Crane Workshop Proceedings.

Glen, T. C., J. E. Thompson, B. M. Ballard, J. A. Roberson, and J. O. French. 2002. Mitochondrial DNA variation among wintering Midcontinental Gulf Coast sandhill cranes. *J. Wildl. Manage.* 66:339-348.

Rhymer, J. M., M. G. Fain, J. E. Austin, D. H. Johnson. 2001. Mitochondrial phylogeography, subspecific taxonomy, and conservation genetics of sandhill cranes (*Grus Canadensis*; Aves: Gruidae). *Conservation Genetics* 2:203-218.

+Added all references and USFWS report

"breeding range in NA formerly more extensive...Cuba population declining...*pratensis* stable...*pulla* increasing...all other subspecies increasing..." (Tacha et al. 1992)

+Added this quote to PT

Threats to Breeding Populations (TB)

"hunting, agricultural expansion, drainage of wetlands led to extirpation of Greater subspecies from many parts of breeding range..." (Ellis et al. 1996)

Comment: Probably market hunting that occurred before 1916. No hunting between 1916 and 1961. Since then hunting has been highly regulated and it can't be proven that it has threatened the population. Hunting is well managed and in spite of increasing harvest, the population trend is stable for the MC Population (USFWS Status Report of Sandhill Cranes 2005)

+ See J. Roberson (*Sandhill Crane*)

DRAFT TB FACTOR SCORE=2

Comment: Change TB to 2. In Intermountain West, some would view the threats to breeding habitat as more severe, perhaps a 5 in some areas. These threats are from home building near the mountains, ask Rod Drewien.

+No consensus to change TB to 2

Threats to Non-breeding Populations (TN)

"mortality associated with hunting also regulates size of mid-continent population..." (Tacha et al. 1992)

Comment: Hunting is necessary to keep crop depredation at levels that farmers will tolerate, hunting also minimizes the chance of disease by reducing unhealthy concentrations

"wintering grounds of Lesser and Canadian subspecies have been extensively altered... leading threat is loss and degradation of wetland habitats, especially ecological and hydrological changes in important staging areas...continuing loss of roosting habitat has concentrated birds with increased risks associated with disease, disturbance...overhunting poses a potential threat...lead, mycotoxin poisoning, abnormal predation pressures, and collisions with fences, vehicles, utility lines are of local concern..." (Ellis et al. 1996)

Comment: Drop Canadian subspecies; Overhunting isn't a threat

+ See J. Roberson (*Sandhill Crane*) for hunting issue

Breeding Distribution (BD)

Add References (More recent than BOA account):

Tacha, T. C., S. A. Nesbitt, and P. A. Vohs. 1994. Sandhill crane in Migratory Shore and Upland Game Bird Management in North America, eds. T. C. Tacha and C. E. Braun.

+Added reference to profile

Jim Hansen

emailed Jennifer Wheeler 09/27/2005

jihansen@mt.gov

I won't comment on the factor scores, but I will offer some ideas that could possibly affect them.

Hunting. As a general comment on several of the species accounts, there is more weight given to the effects of hunting on populations than I think is accurate or appropriate. We're told, for example, that "over hunting" is one of the threats to breeding populations of American coots. I understand that this was found in a species account in the literature, but that doesn't make it true that it's high enough on the list of threats to be worth mentioning. Other such statements in the accounts include the following:

Sandhill crane - We're told that "overhunting poses a potential threat." This is an overstatement because the harvest of sandhill cranes is very closely regulated and monitored.

+ See J. Roberson (Sandhill Crane) for hunting issue

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

Sandhill Crane: wintering locales in C (vicinity of Cheneyville, long standing) and SW Louisiana (Lacassine NWR, recently established) not shown on accompanying map.

+Added this information

Craig Mortimer

emailed Jennifer Wheeler 10/6/05

Larry:

I notified the new chairman of the Pacific Flyway Study Committee of the content of the recent email correspondence with reference to the recent conservation concern rankings. I further encouraged him to converse with the SC members to determine whether there is an appetite for the SC to provide 11th hour input in front of the Waterbird Society's October 15th conference. Although I embrace all initiatives designed to gather more information, I have to always be mindful of the needs assessment before assigning priority. In light of the MWI survey data for coots, which does not include urban coots which can be numerous and are excluded from the survey area, I am left scratching my head. The Pacific Flyway is presently involved in a number of projects to expand knowledge of the RMP crane. I have attached some of the status reports and recommendations from the group's 2005 meetings. The RMP crane fall recruitment survey has not yet occurred, but given habitat circumstances up north, I would expect that the recruitment rate will be up this year. I am certain the study committee will be astonished by our summer survey results of the Lower Colorado River sandhill crane population.

+Following the Marshbird Workshop, interim category placement for AMCO is Low-Moderate; will engage marshbird network in further discussion of this species in early 2006

Gary Ivey

emailed to Jennifer Wheeler 10/10/05

My primary recommendation is that cranes be ranked at a population level, since most NA crane populations already have Flyway Management Plans or Recovery Plans in place for their management and conservation. I also made some comments about what I think I know about habitats and status. I have not had time to review the species profiles; however, I briefly looked at the sandhill crane profile and it seems to ignore the T&E status of Mississippi, Florida and Cuban sandhills and does not discuss the status of the various populations. It deals with the subspecies and also seems to ignore the various genetic papers defining only 2 subspecies.

+These comments were represented by Don Paul and Helen Hands at the workshop. Recognize that a continental assessment is difficult for species with subspecies complexes of variable status. Regional working groups identify conservation priorities and actions based on subspecies status. Added information to profile concerning changed genetic identification of subspecies. Will engage marshbird network in further discussion of this species in early 2006

Gary Krapu

emailed to Jennifer Wheeler 10/11/05

I reviewed the document and have the following comments:

Under **Population Trend (PT)**:

1. No comment.

Under **Population Size (PS)**:

1. Based on work we have done also taking into account information collected by others, we estimate number of *G. canadensis canadensis* to ~ 400,000+ birds.
2. Estimate of *G. c. rowani* given is much too high. We estimate ~150,000 rowani.

Threats to Breeding Populations (TB)

1. I know of no areas where recreational hunting in modern times is a threat to the breeding population. Adverse weather conditions currently pose the primary risk to reproductive success but major development of energy resources and other forms of resource extraction and global warming pose potential major risks going forward. Along the southern edge of the breeding range, human activity from residential and other forms of development and agricultural expansion pose significant risks.

Threats to Non-breeding Populations. (TN)

1. Massive alteration of wintering and migration habitat have led to major crowding that has increased the risk of disease outbreaks and along with agricultural changes have reduced the capacity of cranes to fatten in preparation for migration and reproduction. Power lines are a significant source of non-breeding mortality. Hunting while an important source of mortality is highly regulated and hunting regulations are subject to change should a decline in population size warrant. Size of the midcontinent population has grown substantially since recreational hunting was implemented in 1961 so a question whether hunting should be listed as a threat beyond possibly noting that it was an important threat in the past before hunting regulations and seasons were established.

Breeding Distribution (BD)

1. *G. canadensis tabida*--confused by Mid-continental "NW" N America. *tabida* breed from Michigan, Ontario westward to Alberta, Oregon and other western states.

Non-breeding Distribution (ND)

1. No comment.

I appreciate having the opportunity to comment and should you have questions don't hesitate to contact me.

+Comments shared at workshop, represented by Helen Hands. Above information added to profile. Will engage marshbird network in further discussion of this species in early 2006

Helen Hands

emailed to Jennifer_A_Wheeler 10/18/2005

helenh@wp.state.ks.us

1. PT: cite USFWS Population Survey data showing stable populations for the Mid Continent and Rocky Mountain populations. Add this to the lit. cited.

+Added this information; will assign interim factor score of 2-3 and engage marshbird network in further discussion of this species in early 2006

2. TB: discussions of hunting and habitat changes in TX should be under TN. Mid Continent Population breeding areas are primarily in Canada, AK, and Siberia and are much less than threatened than breeding populations that nest in the U.S. and Cuba. **Change TB to 2 for the entire SACR species.** TB for some subspecies may be 5.

+Marshbird Workshop agreed to TB=4; Will engage marshbird network in further discussion of this species in early 2006

Threats section re-ordered. Previous language removed (if in response to incomplete or unclear quotes) or tightened. Summary statement about significance of threats, and management benefits associated with harvest, added.

3. TN – quote from Tacha et al. (1992) may be out of date. Hunting of Mid Continent and Rocky Mountain populations is not a threat. Increase in agriculture to some extent has been good for SACR because waste grain is an important food for non-breeding cranes. Increase in agriculture may have fueled population increases. Concern in some areas with change in crops from wheat and corn to soybeans and cotton. Also, concern with corn harvest on Platte becoming too efficient so less waste grain. Less waste grain also a function of increasing competition with increasing numbers of geese.

Agriculture too complicated and issue to be dealt with in a 2-page species assessment. Where is overhunting occurring? I think S. Maxson's comment was misinterpreted here. He was giving a hypothetical.

+Marshbird Workshop agreed to TN=4; Will engage marshbird network in further discussion of this species in early 2006

Threats section re-ordered. Previous language removed (if in response to incomplete or unclear quotes) or tightened. Summary statement about significance of threats, and management benefits associated with harvest, added.

4. Why do you continue to use *rowani*? Recent DNA studies show these are *tabida*. If you keep *rowani*, mention that recent research doubts its existence.

+Added information concerning changed genetic identification of subspecies

5. Known breeding concentration map should be revised with Gary Krapu's satellite data for Mid-Continent sandhill cranes.

+Will add this information when it becomes available

Ron Bazin

emailed to Katharine Parsons Thursday, November 14, 2005

Ron.Bazin@EC.GC.CA

Based on suggestions and comments from Canada, and considering that Canada has >70% of breeding population (see BNA account), that this species receive either a Low Concern or a Not Currently at Risk category. Whether it receives one or the other will depend on the BD and ND factor scores. According to the BNA accounts and the maps here, how can the ND area be bigger than the BD area. These need to be reviewed, and depending on whether they come out as 3 or 4 will determine what the category will be (Low concern if either is 4 and Not Currently at Risk if both are 3). Also the same comment is given for this species that the ND cannot for the most part overlap with the BD in Canada at least as most all wetlands are frozen in winter.

+Please note that non-breeding is not equivalent to "wintering" range. Non-breeding includes all areas where non-breeding birds are found and generally corresponds to the species' entire range of occurrence since migrating, "wintering" and/or subadult birds are generally found throughout the species' range.

Population Trend

In Ontario, after similar field effort, the SACR showed breeding evidence in 3.5 x as many 10 km squares during the second Breeding Bird Atlas 2001-2004 (N=727) as compared to the first Atlas, 1981-1985 (N=210) and it is well known that the breeding status of the species has greatly increased (2nd Ontario Breeding Bird Atlas, in prep.)

On the Great Lakes, for the period 1995 – 2004, Archer and Timmermans (2004) reported non-significant increases in SACRs ranging from 2.9 to 7.8%/yr as determined through their Marsh Monitoring Program (MMP).

Using Canadian BBS data, SACRs showed significant increases of 13.4% per year over the long term (1968-2002) and 9.8% per year over a shorter term (1993-2002)(Downs et al. 2003)

Increasing numbers of this wary bird have been evident in Manitoba over the past 20-30 years, especially in the southeast (MARC 2003).

+Added above information to profile

We suggest that the PT factor score be 2 based on Canadian data, and considering that according to Canadian Waterbird Plan, >70% of the breeding range is in Canada.

+Marshbird Workshop agreed to PT=3; Will assign interim factor score of 2-3 and engage marshbird network in further discussion of this species in early 2006

Population Size

One of the Yukon's most spectacular natural events is the migration of over 150,000 Sandhill Cranes [*G.c. canadensis*] through the Tintina Trench in May and September, on their way to and from breeding Grounds in Alaska and Siberia (Sinclair et al. 2003).

+Added above information to profile

Canadian reviewers agree with PS=2

Threats to Breeding Populations

I would question this score (TB=4) and suggest a 3 might be more appropriate. Alternatively, assess score by subspecies.

+Marshbird Workshop agreed to TB=4; Will engage marshbird network in further discussion of this species in early 2006

Threats section re-ordered. Previous language removed (if in response to incomplete or unclear quotes) or tightened. Summary statement about significance of threats, and management benefits associated with harvest, added.

Threats to Non-breeding Populations

I would question this score (TN=4) and suggest a 3 might be more appropriate. Alternatively, assess score by subspecies.
+Marshbird Workshop agreed to TB=4; Will engage marshbird network in further discussion of this species in early 2006

Threats section re-ordered. Previous language removed (if in response to incomplete or unclear quotes) or tightened. Summary statement about significance of threats, and management benefits associated with harvest, added.

Citations:

Archer, R.W. and S.T.A. Timmermans. 2004. The Marsh Monitoring Program annual report, 1995-2004: annual indices in bird abundance and amphibian occurrence in the Great Lakes basin. Unpublished report by Bird Studies Canada. xxpp.

Downes, C.M., B.T. Collins and M. Damus. 2003. Canadian Bird Trends Web site Version 2.1. Migratory Birds Conservation Division, Canadian Wildlife Service, Hull, Quebec. (http://www.cws-scf.ec.gc.ca/birds/trends/disclaimer_e.cfm)

MARC (Manitoba Avian Research Committee) 2003. Birds of Manitoba. Manitoba Naturalists Society. Friesens Printers, Altona, Manitoba. 504 pp.

Sinclair, P.H., W.A. Nixon, C.D. Eckert and N.L. Hughes. 2003. Birds of the Yukon Territory. UBC Press, Vancouver, B.C. 595 pp.

2nd Ontario Breeding Bird Atlas. In Prep. M. Cadman et al. [Eds.] . Federation of Ontario naturalists & Bird Studies Canada.

+Added above information to profile

Suzanne Fellows

emailed to Jennifer Wheeler 15 Nov 2005

Suzanne_Fellows@fws.gov

monitored by populations within the U.S. which should be reflected here. Gary Krapu at USGS -- Northern Prairie should have some current/updated genetic information available

PT/PS: much better information exists on trends and population sizes; use the Status and Harvest of Sandhill Crane 2005 report by Sharp et al. (on USFWS Migratory Bird Website); *G. c. c.* as being stable is stated in the report (use this instead of pers. comm.)

Separate breeding/migration/wintering threats by population as that is the way they are managed for

TB: separate out regulated sport hunting (which does not take place during the breeding season), market hunting (which is historic in nature), and Alaska subsistence harvest. Regulated sport hunting does not occur during the breeding season and should not be considered a TB. If you are concerned that there are long-term effects on the breeding populations due to regulated sport hunting, please state it in such a way that it is clear what the effects may be and the basis of inclusion as a TB (rather than TN)

In the U.S. this species is managed by populations and according to developed cooperative flyway management plans. These plans are not mentioned but should be.

Suburbanization is a threat to some breeding subpopulations.

Map shows southern migration arrows but not northern.

+Added above information to profile. Will engage marshbird network in further discussion of this species in early 2006

Threats section re-ordered. Previous language removed (if in response to incomplete or unclear quotes) or tightened. Summary statement about significance of threats, and management benefits associated with harvest, added.

Steve Maxson

Emailed to Jennifer Wheeler 3/2/2006

steve.maxson@dnr.state.mn.us

My only comment on the revised SACR writeup is regarding the PT segment on the Great Lakes. It is my view that non-significant increases are not really increases and shouldn't be reported as such. If the survey results are non-significant, then you can't really tell whether the population has gone up or down. (chances are that the population has gone up, but the survey used evidently does not have the power to document that.)

+Segment left in, since it does clearly indicate that the increase is non-significant and gives the reader additional information. Profiles are viewed as working documents not publishable pieces.

Mike Rabe
Emailed to Jennifer Wheeler 3/3/2006
MRabe@azgfd.gov

I think your latest version of the sandhill crane profile and status assessment is much more accurate than the earlier iterations. I approve of the current version. I want to thank you for your efforts on that. I will make sure the Pacific Flyway webless study committee gets a chance to look at all of these. We meet next week.

+Acknowledged and thanked.

Gary Ivey
Emailed to Jennifer Wheeler 3/3/2006
ivey@oregonvos.net

Here are my comments on the sandhill crane profile. The status of the subspecies sandhill cranes differ in North America and further the status of populations differ even more. Although all populations appear to be stable or increasing, there is much concern about certain populations; some are federally listed as threatened or endangered (Florida, Mississippi, Cuban), some are on provincial or state lists (B.C.—blue listed; Washington State--endangered; California--Greaters are threatened).

If we were considering populations I could see much higher PT scores for those listed federally or by states and provinces and a "high" concern status. I am worried that assigning the species as a whole a "low" concern would dilute conservation and recovery efforts for those populations of concern. Breeding populations of tabida and rowani in B.C., Washington State, and California have not fully recovered from past over-hunting, and much of their former range remains unoccupied. This is also true for the Rocky Mountain Population which once nested as far south as northern New Mexico. There are also threats to some populations from development and changes in agricultural practices. Major wintering areas in California are threatened by urbanization and conversion to incompatible crops as is the only wintering site in SW Washington State. Urbanization in Florida is impacting the Florida Sandhill. Therefore, I recommend that "Moderate" concern be retained as the status for the species.

Further, I suggest a separate profile for each population, which would more fairly define their need in prioritizing conservation efforts. We dealt with Sandhill Cranes at the population level in the IWWCP.

For reference, I have attached a couple of papers; one on conservation issues in California and another on some work I did on rowani in Washington, which reviews their historic breeding distribution. Here are the citations for these 2 papers:

Littlefield, C. D., and G. L. Ivey. 1999. Conservation Assessment for Greater Sandhill Cranes wintering on the Cosumnes River Floodplain and Delta regions of California. Unpublished report. The Nature Conservancy, Galt, California.

Ivey, G. L., C. P. Herziger, and T. Hoffmann. in press. ANNUAL MOVEMENTS OF PACIFIC COAST SANDHILL CRANES. PROCEEDINGS of the 9th NORTH AMERICAN CRANE WORKSHOP.

+Acknowledge that approach for the continental-scale assessment is at the species level, since regional waterbird plans (and species-specific management and recover plans) do treat the subspecies/populations. Concern for subspecies footnoted in the table.

Whooping Crane

Robert Russell

emailed Katharine Parsons Friday, September 23, 2005

Robert_Russell@fws.gov

Whooping Crane: note on population trends of experimental populations: FL population estimated at 60 individuals (summer 2005) and declining due to predation and power line collisions while Wisconsin population which winters in SE USA increasing and at 42 birds (summer 2005).

+Added Florida info to PS

+Added threats to TB

Andrew Forbes

emailed to Katharine Parsons, 10/7/05

My only comment on the Marshbird assessment would be to move the Whooping Crane from High Concern to Highly Imperiled. Given that the bulk of population is still concentrated at one breeding and wintering site, and the population is still very small, that they are still extremely vulnerable, much more so than the King Rail and American Bittern that currently share the same ranking.

+From Kathy: Thanks very much for your comment regarding the Whooping Crane. We'll discuss this specifically at the workshop next week where we expect some draft rankings will warrant adjustments. Thanks again for assisting in this process.

+Marshbird Workshop agreed to category of High Concern given the consistent increases in population size over the past 60 years. The categorization is qualified by acknowledging that the small population size of WHCR, although increasing, continues to contribute significantly to vulnerability.

Suzanne Fellows

emailed to Jennifer Wheeler 15 Nov 2005

Suzanne_Fellows@fws.gov

Map shows southern migration arrows but not northern. Map could be interpreted to read that there are birds in the Gulf of Mexico which migrate into Aransas. Rocky Mountain population no longer around, suggest changing map to reflect this.

You could add illegal shooting as a TN -- cite KS, FL, TX cases.

+Added above information to profile.